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First Session
Thirty-seventh Parliament, 2001-02

SENATE OF CANADA

*Proceedings of the
Special Committee on*

Illegal Drugs

Chair:

The Honourable PIERRE CLAUDE NOLIN

Wednesday, August 28, 2002 (*in camera*)

Issue No. 23

Volume 1 of 4

Fifty-second meeting on:

Reassessing Canada's anti-drug legislation
and policies

INCLUDING:

THE FINAL REPORT OF THE COMMITTEE

(Cannabis: Our Position for a
Canadian Public Policy –

Part I - General Orientation, and

Part II - Cannabis: Effects, Types of Use, Attitudes)

Première session de la
trente-septième législature, 2001-2002

SÉNAT DU CANADA

*Délibérations du
Comité spécial sur les*

Drogues illicites

Président:

L'honorable PIERRE CLAUDE NOLIN

Le mercredi 28 août 2002 (à huis clos)

Fascicule n° 23

Volume 1 de 4

Cinquante-deuxième réunion concernant:

Le réexamen des lois et des politiques
antidrogue canadiennes

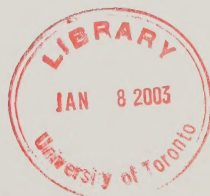
Y COMPRIS:

LE RAPPORT FINAL DU COMITÉ

(Le cannabis: Positions pour un régime de
politique publique pour le Canada –

Partie I - Orientations générales, et

Partie II - Le cannabis: Effets, usages, attitudes)



THE SPECIAL COMMITTEE ON ILLEGAL DRUGS

The Honourable Senator Pierre Claude Nolin, *Chair*

The Honourable Senator Colin Kenny, *Deputy Chair*

and

The Honourable Senators:

Banks	* Lynch-Staunton
* Carstairs, P.C.	(or Kinsella)
(or Robichaud, P.C.)	Maheu
Forrestall	

**Ex Officio Members*

(Quorum 3)

LE COMITÉ SPÉCIAL SUR LES DROGUES ILLICITES

L'honorable sénateur Pierre Claude Nolin, *président*

L'honorable sénateur Colin Kenny, *vice-président*

et

Les honorables sénateurs:

Banks	* Lynch-Staunton
* Carstairs, c.p.	(ou Kinsella)
(ou Robichaud, c.p.)	Maheu
Forrestall	

**Membres d'office*

(Quorum 3)

MINUTES OF PROCEEDINGS

OTTAWA, Wednesday, August 28, 2002
(52)

[English]

The Special Committee on Illegal Drugs met this day *in camera* in room 256-S, Centre Block, at 9:31 a.m., the Chair, the Honourable Senator Pierre Claude Nolin, presiding.

Members of the committee present: The Honourable Senators Kenny, Nolin and Rossiter (3).

In attendance: Director of Research: Daniel Sansfaçon; from the Committees Directorate: Daniel Charbonneau; from the Library of Parliament: Gérald Lafrenière; from Newman Communications: David Newman; from the Office of Senator Nolin, François Dubois; from the office of Senator Maheu, Philippe Brideau; from the office of Senator Rossiter, Barbara Wheelock; Page: Alexandra Spiess.

Pursuant to the Order of Reference adopted by the Senate on Thursday, March 15, 2001, the committee proceeded to study Canada's anti-drug legislation and policies. (*See Issue No. 1, March 19, 2001, for the full text of the Order of Reference.*)

It was agreed, — That available funds be allocated to the Chair for travel to promote the report following its tabling.

It was agreed, — That the draft report and summary as presented be approved.

It was agreed, — That the Chair be authorized to table the report with the Clerk of the Senate.

It was agreed, — That funds be found within the committee's budget to cover special binding, to a maximum of \$ 2,050.55.

It was agreed, — That the Chair be authorized to coordinate the release of the report to the media, as per the draft communication plan as amended.

It was agreed, — That money be reallocated to send summaries by courier to the media.

At 11:20 a.m., the committee adjourned to the call of the Chair.

ATTEST:

Le greffier du comité,

Blair Armitage

Clerk of the Committee

PROCÈS-VERBAL

OTTAWA, le mercredi 28 août 2002
(52)

[Traduction]

Le Comité spécial sur les drogues illicites se réunit aujourd'hui à huis clos, à 9 h 31, dans la salle 256-S de l'édifice du Centre, sous la présidence de l'honorable sénateur Pierre Claude Nolin (*président*).

Membres du comité présents: Les honorables sénateurs Kenny, Nolin et Rossiter. (3)

Également présents: Directeur de la recherche: Daniel Sansfaçon; de la Direction des comités: Daniel Charbonneau; de la Bibliothèque du Parlement: Gérald Lafrenière; de Newman Communications: David Newman; du bureau du sénateur Nolin, François Dubois; du bureau du sénateur Maheu, Philippe Brideau; du bureau du sénateur Rossiter, Barbara Wheelock; page: Alexandra Spiess.

En conformité avec l'ordre de renvoi adopté par le Sénat le jeudi 15 mars 2001, le comité poursuit son étude des lois et des politiques antidrogue canadiennes. (*Le texte intégral de l'ordre de renvoi se trouve dans le fascicule n° 1 en date du 19 mars 2001.*)

Il est entendu — Que les fonds disponibles seront mis à la disposition du président pour lui permettre de se déplacer en vue de promouvoir le rapport, après son dépôt.

Il est entendu — Que l'ébauche de rapport et de résumé est approuvée telle quelle.

Il est entendu — Que le président est autorisé à déposer le rapport auprès du greffier du Sénat.

Il est entendu — Que l'on trouvera dans le budget du comité des fonds pour payer la reliure spéciale, jusqu'à concurrence de 2 050,55 \$.

Il est entendu — Que le président est autorisé à coordonner la diffusion du rapport aux médias, comme le prévoit l'ébauche modifiée du plan de communications.

Il est entendu — Que les fonds seront réaffectés de manière à envoyer par messenger des résumés aux médias.

À 11 h 20, le comité s'ajourne jusqu'à nouvelle convocation de la présidence.

ATTESTÉ:



Senate

Sénat

CANADA

CANNABIS : *OUR POSITION FOR A CANADIAN PUBLIC POLICY*

REPORT OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

VOLUME I : PARTS I AND II

CHAIRMAN

PIERRE CLAUDE NOLIN

DEPUTY CHAIRMAN

COLIN KENNY

SEPTEMBER 2002

ORDER OF REFERENCE

Extract from the Journals of the Senate of March 15, 2001:

Resuming debate on the motion of the Honourable Senator Nolin, seconded by the Honourable Senator Molgat:

That a special committee of the Senate be struck to examine:

- The approach taken by Canada to cannabis, its preparations, derivatives and similar synthetic preparations, in context;
- The effectiveness of this approach, the means used to implement it and the monitoring of its application;
- The related official policies adopted by other countries;
- Canada's international role and obligations under United Nations agreements and conventions on narcotics, in connection with cannabis, the Universal Declaration of Human Rights and other related treaties; and
- The social and health impacts of cannabis and the possible consequences of different policies;

That the special committee consist of five senators, three of whom shall constitute a quorum;

That the Honourable Senators Banks, Kenny, Nolin, Rossiter and (a fifth Senator to be named by the Chief Government Whip) be named to the committee.

That the committee be authorized to send for persons, papers and records, to hear witnesses, to report from time to time, and to print from day to day such papers and evidence as may be ordered by it;

That the briefs and evidence heard during consideration of Bill C-8, *An Act respecting the control of certain drugs, their precursors and other substances and to amend certain other Acts and repeal the Narcotic Control Act in consequence thereof*, by the Standing Senate Committee on Legal and Constitutional Affairs during the Second Session of the Thirty-fifth Parliament be referred to the committee;

That the documents and evidence compiled on this matter and the work accomplished by the Special Senate Committee on Illegal Drugs during the Second Session of the Thirty-sixth Parliament be referred to the committee;

That the committee be empowered to authorize, if deemed appropriate, the broadcasting on radio and/or television and the coverage via electronic media of all or a part of its proceedings and the information it holds;

That the committee present its final report no later than August 31, 2002; and that the committee retain the powers necessary to publicize its findings for distribution of the study contained in its final report for 30 days after the tabling of that report;

That the committee be authorized, notwithstanding customary practice, to table its report to the Clerk of the Senate if the Senate is not sitting, and that a report so tabled be deemed to have been tabled in the Senate.

After debate,

The question then being put on the main motion as amended, it was adopted.

Extract from the Journals of the Senate of May 9, 2002:

The Honourable Senator Nolin moved, seconded by the Honourable Senator Stratton,

That the date of presentation by the Special Senate Committee on Illegal Drugs of the final report on its study into reassessing Canada's anti-drug legislation and policies, which was authorized by the Senate on March 15, 2001, be extended from August 31, 2002 to September 13, 2002.

The question being put on the motion, it was adopted.

ATTEST:

Paul C. Bélisle
Clerk of the Senate

A WORD OF THANKS

I am very proud of the report on cannabis being made public today by the Senate Special Committee on Illegal Drugs. It marks a stage in Canada's public policy on drugs, and I have no doubt that it will find an attentive readership, despite its impressive size.

The report is the product of a team effort over a period of two years. At the risk of leaving anyone out, and I hope I will be pardoned should I do so, I would like to express my gratitude to those most closely involved with the project.

I would first thank all Canadians, who, from near and far, shared in our efforts, by writing us, by attending our hearings and our open forums in the regions, by watching us on television and, quite simply, by taking the time to learn about this important social policy issue. Their contributions, their questions and their comments were a source of inspiration. We will not forget the welcome given us by the Chiefs of the Piapot tribe in Saskatchewan. The ceremony they held for us was truly healing.

The Committee could not have done its work without the immense contribution of its research team. This small group was under the able direction of sociologist Dr Daniel Sansfaçon, whose rigour and devotion enabled the Committee to meet the highest standards of quality in its work and in the drafting of its report. Mr Gérald Lafrenière and Ms Chantal Collin, researchers with the Parliamentary Research Branch of the Library of Parliament working with him, provided invaluable support. I would take the opportunity to thank the Parliamentary Research Branch and its Director General specifically for their diligence and professionalism in responding to our imposing program of work. Finally, I wish to mention the contributions by Ms Barbara Buston Wheelok, assistant to Senator Rossiter, to Mr François Dubois, my research assistant, and to Messrs Jean-Guy Desgagné and David Newman in Communications.

The Committee benefited in its work from the expertise and the generosity of the many experts who testified before it or whom it met privately, and whose names are appended. I would thank them one and all.

We were also able to draw on the competence of the committee clerks and on the efficiency of their administrative personnel in organizing our many working and public meetings. My thanks to Blair Armitage, Daniel Charbonneau and Adam Thompson.

Our report, with its great concern for transparency and rigour, exemplifies the highest standards maintained by the Senate. I would thank my colleagues in the Senate, who entrusted us with this mandate. In concluding, I would like to express my gratitude to my colleagues who took part in our work and especially to each of the members of the Senate Special Committee on Illegal Drugs: its Deputy Chair, Senator Colin Kenny, and Senators Tommy Banks, Shirley Maheu and Eileen Rossiter. They did a remarkable job.

My colleagues, I believe Canadians may rightly be proud of our parliamentary institution.

Pierre Claude Nolin

Senator

Chair, Senate Special Committee on Illegal Drugs

MEMBERS OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

1. MEMBERS OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

Honourable Pierre Claude Nolin
(Chair)

Honourable Colin Kenny
(Deputy Chair)

Honourable Tommy Banks

Honourable Eileen Rossiter

Honourable Shirley Maheu

Honourable John Lynch-Staunton *

Honourable Sharon Carstairs, P.C.* **

Honourable Noël A. Kinsella *

Honourable Fernand Robichaud, P.C. *

2. OTHER SENATORS WHO PARTICIPATED IN THE PROCEEDINGS OF THE COMMITTEE

Honourable Michel Biron

Honourable Laurier LaPierre

Honourable Pat Carney, P.C.

Honourable Jean Lapointe

Honourable Thelma Chalifoux

Honourable Edward M. Lawson

Honourable Ione Christensen

Honourable Lorna Milne

Honourable Ethel M. Cochrane

Honourable Yves Morin

Honourable Pierre De Bané, P.C., Q.C.

Honourable Lucie Pépin ***

Honourable Consiglio Di Nino

Honourable Marie-P. Poulin

Honourable Joyce Fairbairn, P.C.

Honourable Marcel Prud'homme, P.C.

Honourable Sheila Finestone, P.C.

Honourable Gerry St. Germain, P.C.

Honourable J. Michael Forrestall

Honourable Peter A. Stollery

Honourable Jeremiah S. Grafstein, Q.C.

Honourable Terry Stratton

Honourable Mobina S.B. Jaffer

Honourable John Wiebe

Honourable Lois M. Wilson

* *Ex Officio* Members

** The Honourable Sharon Carstairs was a member of the Committee from April 2000 to October 2000

*** The Honourable Lucie Pépin was a member of the Committee from April 2000 to October 2000

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GLOSSARY OF KEY TERMS

Abuse

Vague term with a variety of meanings depending on the social, medical and legal contexts. Some equate any use of illicit drugs to abuse: for example, the international conventions consider that any use of drugs other than for medical or scientific purposes is abuse. The Diagnosis and Statistical Manual of the American Psychiatric Association defines abuse as a maladaptive pattern of substance use leading to clinically significant impairment or distress as defined by one or more of four criteria (see chapter 7). In the report, we prefer the term excessive use (or harmful use).

Acute effects

Refers to effects resulting from the administration of any drug and specifically to its short term effects. These effects are distinguished between central (cerebral functions) and peripheral (nervous system). Effects are dose-related.

Addiction

General term referring to the concepts of tolerance and dependency. According to WHO addiction is the repeated use of a psychoactive substance to the extent that the user is periodically or chronically intoxicated, shows a compulsion to take the preferred substance, has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain the substance by almost any means. Some authors prefer the term addiction to dependence, because the former also refers to the evolutive process preceding dependence.

Agonist

A substance that acts on receptor sites to produce certain responses.

Anandamide

Agonist neurotransmitter of the endogenous cannabinoid system. Although not yet fully understood in research, these neurotransmitters seem to act as modulators, THC increasing the liberation of dopamine in nucleus accumbens and cerebral cortex.

At-risk use

Use behaviour which makes users at-risk of developing dependence to the substance.

Cannabinoids

Endogenous receptors of the active cannabis molecules, particularly 9-THC. Two endogenous receptors have been identified: CB1 densely concentrated in the hippocampus, basal ganglia, cerebellum and cerebral cortex, and CB2, particularly abundant in the immune system. The central effects of cannabis appear to be related only to CB1.

Cannabis

Three varieties of the cannabis plant exist: *cannabis sativa*, *cannabis indica*, and *cannabis ruderalis*. *Cannabis sativa* is the most commonly found, growing in almost any soil condition. The cannabis plant has been known in China for about 6000 years. The flowering tops and leaves are used to produce the smoked cannabis. Common terms used to refer to cannabis are pot, marihuana, dope, ganja, hemp. Hashish is produced from the extracted resin. Classified as a psychotropic drug, cannabis is a modulator of the central nervous system. It contains over 460 known

chemicals, of which 60 are cannabinoids. Delta-9-tétrahydrocannabinol, referred to as THC, is the principal active ingredient of cannabis. Other components such as delta-8-tétrahydrocannabinol, cannabinol and cannabidiol are present in smaller quantities and have no significant impacts on behaviour or perception. However, they may modulate the overall effects of the substance.

Chronic effects

Refers to effects which are delayed or develop after repeated use. In the report we prefer to use the term consequences of repeated use rather than chronic effects.

Commission on narcotic drugs (CND)

The Commission on Narcotic Drugs (CND) was established in 1946 by the Economic and Social Council of the United Nations. It is the central policy-making body within the UN system for dealing with all drug-related matters. The Commission analyses the world drug abuse situation and develops proposals to strengthen international drug control.

Decriminalization

Removal of a behaviour or activity from the scope of the criminal justice system. A distinction is usually made between *de jure decriminalization*, which entails an amendment to criminal legislation, and *de facto decriminalization*, which involves an administrative decision not to prosecute acts that nonetheless remain against the law. Decriminalization concerns only criminal legislation, and does not mean that the legal system has no further jurisdiction of any kind in this regard: other, non-criminal, laws may regulate the behaviour or activity that has been decriminalized (civil or regulatory offences, etc.).

Diversion

The use of measures other than prosecution or a criminal conviction for an act that nonetheless remains against the law. Diversion can take place before a charge is formally laid, for example if the accused person agrees to undergo treatment. It can also occur at the time of sentencing, when community service or treatment may be imposed rather than incarceration.

Depenalisation

Modification of the sentences provided in criminal legislation for a particular behaviour. In the case of cannabis, it generally refers to the removal of custodial sentences.

Dependence

State where the user continues its use of the substance despite significant health, psychological, relational, familial or social problems. Dependence is a complex phenomenon which may have genetic components. Psychological dependence refers to the psychological symptoms associated with craving and physical dependence to tolerance and the adaptation of the organism to chronic use. The American Psychiatric Association has proposed seven criteria (see chapter 7).

Dopamine

Neuromediator involved in the mechanisms of pleasure.

Drug

Generally used to refer to illicit rather than licit substances (such as nicotine, alcohol or medicines). In pharmacology, the term refers to any chemical agent that alters the biochemical or physiological processes of tissues or organisms. In this sense, the term drug refers better to any substance which is principally used for its psychoactive effects.

European Monitoring Centre on Drugs and Drug Addiction (EMCDDA)

The European Monitoring Centre was created in 1993 to provide member states objective, reliable and comparable information within the EU on drugs, drug addictions and their consequences. Statistical information, documents and techniques developed in the EMCDDA are designed to give a broad perspective on drug issues in Europe. The Centre only deals with information. It relies on national focal points in each of the Member States.

Fat soluble

Characteristic of a substance to irrigate quickly the tissues. THC is highly fat-soluble.

Gateway (theory)

Theory suggesting a sequential pattern in involvement in drug use from nicotine to alcohol, to cannabis and then “hard” drugs. The theory rests on a statistical association between the use of hard drugs and the fact that these users have generally used cannabis as their first illicit drug. This theory has not been validated by empirical research and is considered outdated.

Half-life

Time needed for the concentration of a particular drug in blood to decline to half its maximum level. The half-life of THC is 4.3 days on average but is faster in regular than in occasional users. Because it is highly fat soluble, THC is stored in fatty tissues, thus increasing its half life to as much as 7 to 12 days. Prolonged use of cannabis increases the period of time needed to eliminate it from the system. Even one week after use, THC metabolites may remain in the system. They are gradually metabolised in the urine (one third) and in feces (two thirds). Traces of inactive THC metabolites can be detected as many as 30 days after use.

Hashish

Resinous extract from the flowering tops of the cannabis plant and transformed into a paste.

International Conventions

Various international conventions have been adopted by the international community since 1912, first under the Society of Nations and then under the United Nations, to regulate the possession, use, production, distribution, sale, etc., of various psychotropic substances. Currently, the three main conventions are the 1961 Single Convention, the 1971 Convention on Psychotropic Substance and the 1988 Convention against Illicit Traffic. Canada is a signatory to all three conventions. Subject to countries' national constitutions, these conventions establish a system of regulation where only medical and scientific uses are permitted. This system is based on the prohibition of source plants (coca, opium and cannabis) and the regulation of synthetic chemicals produced by pharmaceutical companies.

International Narcotics Control Board (INCB)

The Board is an independent, quasi-judicial organisation responsible for monitoring the implementation of the UN conventions on drugs. It was created in 1968 as a follow up to the 1961 Single Convention, but had predecessors as early as the 1930s. The Board makes recommendations to the UN Commission on Narcotics with respect to additions or deletions in the appendices of the conventions.

Intoxication

Disturbance of the physiological and psychological systems resulting from a substance. Pharmacology generally distinguishes four levels: light, moderate, serious and fatal.

Joint

Cigarette of marijuana or hashish with or without tobacco. Because joints are never identical, scientific analyses of the effects of THC are more difficult, especially in trying to determine the therapeutic benefits of cannabis and to examine its effects on driving.

Legalisation

Regulatory system allowing the culture, production, marketing, sale and use of substances. Although none currently exist in relation to «street-drugs» (as opposed to alcohol or tobacco which are regulated products), a legalisation system could take two forms: without any state control (free markets) and with state controls (regulatory regime).

Marijuana

Mexican term originally referring to a cigarette of poor quality. Has now become equivalent for cannabis.

Narcotic

Substance which can induce stupor or artificial sleep. Usually restricted to designate opiates. Sometimes used incorrectly to refer to all drugs capable of inducing dependence.

Office of national drug control policy (ONDCP) USA

Created in 1984 under the Reagan presidency, the Office is under the direct authority of the White House. It coordinates US policy on drugs. Its budget is currently US \$18 billion.

Opiates

Substance derived from the opium poppy. The term opiate excludes synthetic opioids such as heroin and methadone.

Prohibition

Historically, the term designates the period of national interdiction of alcohol sales in the United States between 1919 and 1933. By analogy, the term is now used to describe UN and State policies aiming for a drug-free society. Prohibition is based on the interdiction to cultivate, produce, fabricate, sell, possess, use, etc., some substances except for medical and scientific purposes.

Psychoactive substance

Substance which alters mental processes such as thinking or emotions. More neutral than the term “drug” because it does not refer to the legal status of the substance, it is the term we prefer to use.

Psychotropic substance (see also psychoactive)

Much the same as psychoactive substance. More specifically however, the term refers to drugs primarily used in the treatment of mental disorders, such as anxiolytic, sedatives, neuroleptics, etc. More specifically, refers to the substances covered in the 1971 Convention on Psychotropic Substances.

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Regulation

Control system specifying the conditions under which the cultivation, production, marketing, prescription, sales, possession or use of a substance are allowed. Regulatory approaches may rest on interdiction (as for illegal drugs) or controlled access (as for medical drugs or alcohol). Our proposal of an exemption regime under the current legislation is a regulatory regime.

Society of Nations (SDN)

International organisation of States until 1938; now the United Nations.

Tetrahydrocannabinol (Δ^9 -THC)

Main active component of cannabis, Δ^9 -THC is very fat-soluble and has a lengthy half-life. Its psychoactive effects are modulated by other active components in cannabis. In its natural state, cannabis contains between 0.5% to 5% THC. Sophisticated cultivation methods and plant selection, especially female plants, leads to higher levels of THC concentration.

Tolerance

Reduced response of the organisms and increased capacity to support its effects after a more or less lengthy period of use. Tolerance levels are extremely variable between substances, and tolerance to cannabis is believed to be lower than for most other drugs, including tobacco and alcohol.

Toxicity

Characteristic of a substance which induces intoxication, i.e., "poisoning". Many substances, including some common foods, have some level of toxicity. Cannabis presents almost no toxicity and cannot lead to an overdose.

United Nations Drug Control Program (UNDCP)

Established in 1991, the Programme works to educate the world about the dangers of drug abuse. The Programme aims to strengthen international action against drug production, trafficking and drug-related crime through alternative development projects, crop monitoring and anti-money laundering programmes. UNDCP also provides accurate statistics through the Global Assessment Programme (GAP) and helps to draft legislation and train judicial officials as part of its Legal Assistance Programme. UNDCP is part of the UN Office for Drug Control and the Prevention of Crime.

World Health Organization (WHO)

The World Health Organization, the United Nations specialized agency for health, was established on 7 April 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

INTRODUCTION

The question of illegal drugs is one of the societal issues that can readily become a moral and indeed emotional matter. Who among us does not have an opinion on drugs and "drug addicts"? Who does not have a parent, friend, young cousin or uncle who has had personal problems at school or at work, perhaps even run-ins with the police and the criminal justice system, as a result of using drugs? Who has not heard of drug traffickers, veritable anti-heroes, whom we find both repulsive and fascinating, all of whom we consider the worst kind of scum, who grow rich by selling adulterated and dangerous products to our children? Every day brings its share of newspaper articles and television news reports on anti-drug operations conducted by police forces: sometimes massive, and almost always spectacular arrests, huge seizures of drugs, cash and weapons of all kinds. Every day we also see articles on money laundering and the corruption of honest men through the illegal drug market. Even closer to home, the events of September 11 shed new light on the ambiguous and alleged relations between the drug trafficking world and the financing of "terrorist" networks. Security is now the key buzz word.

The drug issue involves the political values of life in society. In what kind of society do we want to live? What place should, and can, drugs occupy in it? For some, drugs are substances that keep individuals in a state of dependence. Using them weakens their moral fibre, makes them more malleable, more subject in particular to (bad) outside influences, and reduces their ability to be productive individuals in society. If they don't bring about human downfall, drugs do prevent the full achievement and realization of human potential. For others, drugs are tools to achieving greater productivity, being more competitive and thus better positioned in a hyper-competitive world. The obvious example of this is doping among elite athletes. For still others, drugs are a preferred means of entering into contact with other aspects of their being, spiritual, artistic aspects, or simply peace and serenity. The history of art is full of examples. These almost diametrically opposed conceptions often leave little room for dialogue and result in considerable prejudice on all sides.

In the past 20 years, we have introduced stringent anti-tobacco programs. And we have definitely achieved a measure of success. We have also adopted stricter measures to put a stop to impaired driving. Here too, we believe we have made significant inroads. The fight against drugs is a kind of metaphor for the type of social policies we expect of governments: policies based on the improved well-being of citizens.

Of course, everything depends on what each person means by the word "drugs". The term is clearly not neutral: it elicits varying degrees of fear and anxiety. And we do not necessarily all include the same substances under that heading. The examples cited above concern illegal drugs, alcohol, tobacco and performance-enhancing substances. A number of psychotropic drugs could also be included. And yet, when we think of drugs, the first things that come to mind are illegal substances: cocaine and heroin, of course, crack and amphetamines for the more sophisticated among us, and, obviously, cannabis and hashish. However, an increasing number of scientific studies and government policies strive to show the interrelationships between different drugs, discussing at-risk behaviours in relation to each drug. As will be seen below, the mere fact of considering alcohol as one drug among others signifies a genuine cultural revolution in a country such as France, a major producer and consumer of wine. And tobacco companies would certainly object to comparing nicotine to heroine.

The members of the **Senate Special Committee on Illegal Drugs** addressed the question of drugs as everyone else does, that is to say with the same preconceptions, with the same basic attitudes, the same fears and the same anxieties. Of course, we had at our disposal the study which a number of our colleagues had conducted in 1996 on government legislation dealing with illegal drugs, which had enabled them to hear a number of witnesses over several months. We also knew at the outset that research expertise would be available to us, but let there be no mistake, it is nevertheless difficult to go beyond attitudes and opinions that have long been taken for granted. Whether one is in favour of enhanced enforcement or, on the contrary, greater liberalization, opinions tend to resist the facts, particularly since, in a field such as this, the production of facts, even through scientific research, is not necessarily a neutral enterprise. It follows then that we too, like you, have our prejudices and preconceptions. And together we must make the effort to go beyond them. That is one of the objectives of this report.

Our report is divided into four parts. Part I outlines our general orientations and comprises four chapters. Chapter 1 describes the Committee's origins and mandate, while Chapter 2 outlines the work we have undertaken, explaining certain choices we have made. Chapter 3 is central to the entire architecture of the report and, as it were, provides a "reading grid". In it, we state what we have called the **guiding principles** for a public policy on illegal drugs. Lastly, Chapter 4 offers a broad overview of the present situation with regard to illegal drugs, placing our efforts in the context of the changes that are occurring in various countries and on the international scene more generally.

Part II is the heart of our report. It provides a comprehensive outline of scientific research findings and the opinions of the experts we heard. Chapter 5 describes the plant from which smokable cannabis and hashish are derived and the pharmacological properties of the cannabinoids, which are their active ingredient. It also provides some figures on sources of production of cannabis and its main trafficking routes. Chapter 6 contains information on uses and users: who uses cannabis, in what circumstances,

what do we know about their user trajectories and, in particular, the highly controversial question as to whether cannabis use leads to the use of other drugs. Chapter 7 describes the physiological and psychological effects and consequences of cannabis, focusing as well on the important issues of cannabis dependence and tolerance. Chapter 8 deals specifically with the important issue of driving under the influence of cannabis. Given the current debates on the issue of therapeutic uses of cannabis, Chapter 9 reviews existing findings. Chapter 10, the last chapter in the section, addresses public opinion, outlining public opinion polls and surveys, reporting also what we were told in the consultations we held in the regions following the publication of our discussion paper in May 2002.

Part III concerns public policy and practices in Canada. When we think of drugs, we immediately think of the legislation governing them. In so doing, we forget that the law is never more than one of a number of elements involved in a public policy. Chapter 11 focuses on the National Drug Strategy, which was in effect in Canada between 1987 and 1997. It must be considered since only in this period in the history of our public drug policies was an attempt made to adopt a comprehensive and integrated strategy. Chapter 12 then describes the history of Canadian drug legislation. Chapter 13 examines the current regulatory regime for therapeutic uses of cannabis. The following four chapters deal with the various components of the implementation of the public policies on illegal drugs. Chapters 14 and 15 discuss respectively police practices and legal practices central to the implementation of those statutory provisions, while Chapters 16 and 17 briefly examine prevention practices and health care practices. Finally, in Chapter 18, we conclude this third part of our report with a series of three observations on these practices, examining in particular the economic costs and unexpected consequences of current public policies.

Part IV addresses public policy options. When it comes to drugs, we cannot avoid the architecture of the international conventions that have governed these substances since 1912. This is the subject of Chapter 19. However, beyond this global framework, countries have chosen different approaches to respond to drug related issues and problems. Chapter 20 describes in detail the public policy frameworks in seven industrialized countries. Finally, chapter 21 is key to understanding our recommendations and their links with our guiding principles. This chapter shows that the criminal law is but one of the tools of public policy in this field. It then distinguishes between the various legal options and clarifies heavily loaded terms such as decriminalisation and legalisation. Finally, based on the accumulated knowledge, our reading of public opinion and our principles, this chapter explains our framework for a comprehensive public policy on cannabis.

Based on all this knowledge gathered, we state a certain number of conclusions and offer our recommendations, which express the fundamental premise underlying our report: *in a free and democratic society, which recognizes fundamentally but not exclusively the rule of law as the source of normative rules and in which government must promote autonomy insofar as possible and therefore make*

only sparing use of the instruments of constraint, public policy on psychoactive substances must be structured around guiding principles respecting the life, health, security and rights and freedoms of individuals, who, naturally and legitimately, seek their own well-being and development and can recognize the presence, difference and equivalence of others.

We are aware, as much now as we were at the start of our work, that there is no pre-established consensus in Canadian society on public policy choices in the area of drugs. In fact, as we have seen, there are few societies where there is a broadly shared consensus among the general public and between the public and experts. We are also aware, perhaps more so than at the outset, that the question of illegal drugs, viewed from the standpoint of the public policies that govern them, is part of a broader international context and that we cannot think or act in isolation. We are aware that our proposals are provocative, that they may meet with some resistance. However, we are convinced that Canadian society has the maturity and openness to welcome this informed debate.

In this, as in so many other areas of public policy, we say that action must be taken and that the knowledge accumulated fully supports the orientations we propose, but that first and foremost the sharing of knowledge and public debate are both necessary and desirable in the democratic life in our society.

PART I
GENERAL ORIENTATION

CHAPTER 1

OUR MANDATE

WORDING

On April 16, 2000, pursuant to a motion by Senator Pierre Claude Nolin, the Senate adopted the following order of reference:

That a Special Committee of the Senate be appointed to reassess Canada's anti-drug legislation and policies, to carry out a broad consultation of the Canadian public to determine the specific needs of various regions of the country, where social problems associated with the trafficking and use of illegal drugs are more in evidence, to develop proposals to disseminate information about Canada's anti-drug policy and, finally, to make recommendations for an anti-drug strategy developed by and for Canadians under which all levels of government work closely together to reduce the harm associated with the use of illegal drugs;

That, without being limited in its mandate by the following, the committee be authorized to:

- *Review the federal government's policy on illegal drugs in Canada, its effectiveness, and the extent to which it is fairly enforced;*
- *Develop a national harm reduction policy in order to lessen the negative impact of illegal drugs in Canada, and make recommendations regarding the enforcement of this policy, specifically the possibility of focusing on use and abuse of drugs as a social and health problem;¹*
- *Study harm reduction models adopted by other countries and determine if there is a need to implement them wholly or partially in Canada;*
- *Examine Canada's international role and obligations under United Nations conventions on narcotics and the Universal Declaration of Human Rights and other related treaties in order to determine whether these treaties authorize it to take action other than laying criminal charges and imposing sentences at the international level;*
- *Explore the effects of cannabis on health and examine whether alternative policy on cannabis would lead to increased harm in the short and long term;*

¹ Emphasis in the original.

- *Examine the possibility of the government using its regulatory power under the Contraventions Act as an additional means of implementing a harm reduction policy, as is done in other jurisdictions;*
- *Examine any other issue respecting Canada's anti-drug policy that the committee considers appropriate to the completion of its mandate.*

Upon adoption of the motion, the Committee chairman asked the Senate to name the members who would form the Committee. The following senators were thus appointed: Pierre Claude Nolin, Chair, Sharon Carstairs, Deputy Chair, Colin Kenny, Lucie Pépin and Eileen Rossiter.

The Committee thus constituted approved a work program and a budget, which it then submitted to its peers in the upper Chamber. The Committee's budget was approved in June 2000, thus making it possible to hire the scientific and administrative personnel who would support its work. The Committee organized its program of hearings of expert witnesses and held its first hearings on October 16, 2000.

However, the Committee was dissolved when the general election was called in October 2000, and restructured on March 15, 2001, but with an amended mandate: the scope of its work was now restricted to cannabis. The Committee's mandate in its present form therefore reads as follows:

That a special committee of the Senate be struck to examine:

- *The approach taken by Canada to cannabis, its preparations, derivatives and similar synthetic preparations, in context;*
- *The effectiveness of this approach, the means used to implement it and the monitoring of its application;*
- *The related official policies adopted by other countries;*
- *Canada's international role and obligations under United Nations agreements and conventions on narcotics, in connection with cannabis, the Universal Declaration of Human Rights and other related treaties; and*
- *The social and health impacts of cannabis and the possible consequences of different policies;*

That the special committee consist of five senators, three of whom shall constitute a quorum;

That the Honourable Senators Banks, Kenny, Nolin, Rossiter and (a fifth Senator to be named by the Chief Government Whip) be named to the committee;

That the committee be authorized to send for persons, papers and records, to hear witnesses, to report from time to time, and to print from day to day such papers and evidence as may be ordered by it;

That the briefs and evidence heard during consideration of Bill C-8, An Act respecting the control of certain drugs, their precursors and other substances and to amend certain other Acts and repeal the Narcotic Control Act in consequence thereof, by the Standing Senate Committee on Legal and Constitutional Affairs during the 2nd Session of the 35th Parliament be referred to the committee;

That the documents and evidence compiled on this matter and the work accomplished by the Special Senate Committee on Illegal Drugs during the 2nd Session of the 36th Parliament be referred to the committee;

That the committee be empowered to authorize, if deemed appropriate, the broadcasting on radio and/or television and the coverage via electronic media of all or part of its proceedings and the information it holds;

That the committee present its final report no later than August 31, 2002; and that the committee retain the powers necessary to publicize its findings for distribution of the study contained in its final report for 30 days after the tabling of that report;

That the committee be authorized, notwithstanding customary practice, to table its report to the Clerk of the Senate if the Senate is not sitting, and that a report so tabled be deemed to have been tabled in the Senate.

ORIGINS

The Committee's mandate is a continuation of the history of drug legislation passed by the Parliament of Canada in 1996, the *Controlled Drugs and Substances Act*. That legislation, which revised drug statutes in Canada by repealing the *Narcotic Control Act* and certain sections of the *Food and Drugs Act*, grew out of a relatively lengthy history of which we will provide only a brief overview here, since Chapter 12 is devoted to a detailed history of drug laws in Canada.

Bill C-7, which was tabled by the newly elected government in February 1994, proposed a revision of illegal drug legislation, in particular to make it more coherent and to render national legislation consistent with Canada's obligations under the *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* signed in 1988. Following prorogation, it was reintroduced in the House of Commons at the start of the 2nd Session, on March 6, 1996, as Bill C-8. It was adopted by the House on the same day and was referred to the Standing Senate Committee on Legal and Constitutional Affairs which conducted a detailed study of it and heard a number of witnesses.

In its report, the Senate Committee on Legal and Constitutional Affairs proposed 15 amendments as well as the striking of a joint parliamentary committee of the House of Commons and the Senate, which would review Canada's drug policy. Bill C-8 was passed and received Royal Assent on June 20, 1996, and is thus Canada's current illegal drug legislation.

While this legislation was being studied by the Sub-Committee on Bill C-7 of the Standing Committee on Health of the House of Commons in 1994 and 1995, "*the vast majority of witnesses (...) were highly critical of the bill. The most general criticisms concerned three points: first, the lack of basic principles or an express statement as to the purpose of the act; second, the fact that the bill followed the prohibition system of the 1920s, subsequently codified in the Narcotic*

*Control Act, and third, the absence of any emphasis on damage reduction and prevention criteria which form the basis of Canada's Drug Strategy."*² Despite the amendments made by the Sub-Committee of the House, the testimony of the persons heard by the Senate Committee was equally critical. Witnesses noted that the Act did not categorize drugs on the basis of the dangers they represented, that it did not contain any specific, rational criteria and that it was impossible, particularly in view of the Act's complexity, to determine how it would be implemented in practice.

All of these criticisms led the Senate Committee to "*propose energetically*" the creation of a Joint Committee of the House of Commons and the Senate that would review all Canadian drug legislation, policies and programs.³

However, the 1997 federal election rendered this suggestion moot. Senator Nolin, convinced of the need for action and faced with the inaction of the House of Commons, thus tabled his first motion in 1999 - that a Senate Committee be struck and given a mandate to examine the legislation, policies and programs on illegal drugs in Canada. The motion was adopted by the Senate in April 2000. In support of the motion, Senator Nolin had commissioned a study on drugs and drug policy in Canada. The purpose of this study, in particular, was "*to assist in analyzing policy on the control of drug use from a new angle, without being influenced by the often unfounded prejudices that Canadian society has of drug addicts*".⁴ Senator Nolin wrote further that a Senate Special Committee "*would be charged, first, with transmitting to the Canadian public accurate and objective information on the use of illegal drugs, their effects on individuals and society and control measures in place. Second, it could conduct consultations on desirable amendments that Parliament should make to legislation on the control of drug use in the years to come.*"⁵

INTERPRETATION

Our mandate comprises four components:

1. Examine the federal government policy on cannabis, the means used to implement it, its control and its effectiveness;
2. Examine the policies and approaches followed in other countries;
3. Examine the implications of the international conventions and treaties; and
4. Examine the social and health effects of cannabis and the possible impacts of different policies.

² Allain, J. (1997) *Bill C-8: Controlled Drugs and Substances Act*. Ottawa, Library of Parliament, page 35.

³ Standing Senate Committee on Legal and Constitutional Affairs, Eleventh rapport, June 1996, page 8.

⁴ Nolin, P.C. (1998) Preface. In Riley, D. (1998), *Drugs and Drug Policy in Canada. A Brief Review and Commentary*. Ottawa, page 10.

⁵ *Ibid.*, page 11.

We chose to interpret our mandate in the broadest manner possible. Some asked us whether it was our ambition to be a second Le Dain Commission.⁶ Others told us we did not have the resources to be so exhaustive and rigorous in our examination. Still others regretted the fact that we were restricted in the first phase of our work to cannabis, as though the various substances could be separated and their users classified accordingly.

Chapter 2, on our work program, will show that we were motivated by a desire to be rigorous and to cast our net wide. We are nevertheless aware of the scope and limits of our role as a Senate Committee, all the more so since the means put at our disposal were as limited as our ambition was generous.

The question of the distinction among substances is more problematical for various reasons. First, recent research shows that it is more important to distinguish between user behaviours than between substances. Based on this view, it is thus not so much the drugs themselves that should be distinguished as the different ways in which they are used and the environments in which those uses take place, and hence the risks a certain number of users run. Here we will discuss at-risk behaviours⁷, which are not determined so much by the characteristics of the substances as by those of the users and the conditions in which they are used. Second, the distinctions between substances have no clear scientific basis. Thus, entirely different classifications are arrived at depending on how one views the pharmacological properties of the various drugs, their effects on physical health and their origins or cultivation methods. And third, a comprehensive and integrated drug policy cannot be put forward on the basis of this distinction between substances.

However, the result of this decision, which forced us to limit our work to cannabis, was something more than just disadvantages and limits. We should admit, first of all, that embracing the entire field of illegal drugs with so little in the way of resources would have been a monumental undertaking. And as recent commissions of inquiry and international scientific conferences have chosen, as we did, to survey the state of knowledge on cannabis, we were able both to make use of their work and to compare it to our own. Lastly, and more particularly, experiments conducted in other countries, in particular the Netherlands, demonstrate the merit in treating cannabis separately, in a "market separation" approach.

In short, while restricting our work to cannabis, we invited the witnesses not to limit themselves to it alone and to show us the links between it and the various at-risk behaviours of users when they occur. We also bore in mind the necessity of addressing

⁶ The Le Dain Commission, which investigated illegal drugs in the early 1970s, will be discussed more fully in Chapter 12. See Canada (1970), *Interim Report of the Commission of Inquiry into the Non-Medical Use of Drugs*. (Le Dain Commission) Ottawa: Queen's Printer.

⁷ See among others: Reynaud, M., P.J. Parquet et G. Lagrue (1999) *Les pratiques addictives. Usage, usage nocif et dépendance aux substances psychoactives*. Rapport préparé à la demande du Directeur général de la Santé. Paris: Secrétariat d'État à la Santé et aux Affaires Sociales.

drugs in the context of an integrated policy, particularly with regard to the major parameters of public policy, legislation or knowledge infrastructure, for example.

CHAPTER 2

OUR WORK

Designing, developing and implementing public policy is the very essence of the role of government, of political life in the broad sense. This fundamental activity presupposes a choice between various alternatives and, in a democratic system, an explanation and justification of the choice that has been made. A public policy, regardless of its object, stands at the confluence of various influences: partisan political considerations of course, economic considerations as well, even increasingly so. However, if it lays claim to a certain degree of rationality and citizen support, a public policy must also be based on rigorous and objective data, preferably from scientific research, and on an understanding of society's expectations and resistance. Lastly, a public policy, in our view, should be founded on, and at the same time promote, guiding principles. By that, we mean a clear and express vision of the principles that guided the choice among various alternatives and that reflect a conception of government and of the relationship between government institutions and civil society.

From the outset, our Committee chose to remain above partisan issues. This is the advantage of belonging to the Senate, which makes it possible to take, on various questions, a more objective view not influenced by concern for re-election. Economic considerations affected us in two different ways. The first, a trivial matter, was related to the budgets allocated to us, which necessarily limited the scope of our work, the second to the economic impact of various public policy options which are discussed in Chapters 18 and 21.

Our work thus focused on the other three sources that should influence a choice of public policy on illegal drugs: knowledge, public opinion and guiding principles.

At the Committee's public hearings, the Chair presented the research program as follows:

In order to fully satisfy the mandate conferred upon the committee, the committee has adopted an action plan. This plan centres around three challenges. The first challenge is that of knowledge. We will be hearing from a wide variety of experts, both from Canada and afar, from academic settings, the police, legal specialists, medical specialists, the government sector and social workers. (...)

The second challenge, surely the most noble challenge, is that of sharing knowledge. The committee hopes that Canadians from coast to coast will be able to learn and share the information that we will have collected. In order to meet this challenge, we will work to distribute this knowledge and make it accessible

*to all. We would also like to hear the opinions of Canadians on this topic and in order to do so, we will be holding public hearings in the spring of 2000 throughout Canada. And finally, the third challenge for this committee will be to examine and identify the guiding principles on which Canada's public policy on drugs should be based.*¹

This chapter describes the various measures we took to ascertain the state of knowledge and public opinion on cannabis and to determine guiding principles. Chapter 3 presents our guiding principles in detail, while Parts II and III outline all the information we were able to gather. First, however, a few words on two working principles which we considered essential to the complete realization of this Committee's mandate.

TWO WORKING PRINCIPLES

In view of the formulation of our mandate, which included an obligation to provide Canadians with objective and rigorous information, we have emphasized rigour and openness throughout the entire process.

It was all the more imperative that we do our work in a rigorous manner since opinions on all sides of the illegal drugs issue are strong and often categorical. Like everyone else, we too had our opinions and preconceptions regarding illegal drugs when we began our work. How could it be otherwise? Like you, we have children. We have had friends and relatives whose lives have been ruined by addiction problems. Our study of the government bill (C-8), which afforded us the opportunity to hear from a certain number of stakeholders and experts, provided us with information, of course, but also revealed major gaps in our knowledge. It then seemed clear to us that opinions were often based on partial and at times incorrect information. On what basis can it be said that cannabis leads to the use of other drugs? What is the empirical basis that supports the notion of cannabis dependence? What leeway does a nation have under the provisions of the international conventions governing the production, trafficking in and possession of illegal drugs?

One cannot assert both one thing and its opposite. However, on the subject of drugs, and specifically cannabis, such very assertions were made to us, and with conviction. How to determine who was right? And to tell opinions from facts?

These findings convinced us that the highest degree of rigour was necessary in the course of our work, as will be seen in the next section.

But rigour is not enough. For this information to reach Canadians, we could not reserve it for our exclusive use, hence the second principle that guided us: openness. From the outset, we insisted that all our work be made available as soon as possible on

¹ Senate of Canada (2001) *The Proceedings of the Special Committee on Illegal Drugs*. Issue No. 1, page 23.

our Web site. There was nothing new in posting witnesses' testimony to a Web site, since this is common practice for most parliamentary committees. However, in addition to this testimony, we also posted a number of studies we had commissioned, many from the Parliamentary Research Branch of the Library of Parliament. These studies, which are often not made public until after a Committee's report is published, were made available to Canadians as they were completed.

Being legislators, we would of course like our work to have an impact on public policy. We also believe it important to provide Canadians with information that is as factual as possible to allow them to benefit from it.

STATE OF KNOWLEDGE

When the Commission of Inquiry into the Non-medical Use of Drugs conducted its work in the early 1970s, like most commissions of inquiry, it had a large staff and budgets enabling it to carry out a vast research program. That was all the more necessary since, at the time, no large pool of knowledge on illegal drugs existed. Virtually nothing was known about the active ingredients of cannabis or even about the pharmacological properties of more traditional drugs, such as heroin and cocaine, and little was known about user trajectories; criminological studies on the relationship between drugs and crime were virtually non-existent, and public policy impact studies were in their earliest stages.

To say the situation has completely changed would be an understatement. In all scientific disciplines, from molecular biology to anthropology, countless studies have been conducted over the past 25 years on illegal drugs in general, and cannabis in particular. They come from the United States, of course, but also from Australia, England, France, Switzerland, Italy, Germany, Sweden, Finland and Denmark to name only a few. They have been conducted by academics interested in these questions on a purely individual basis, by pharmacological laboratories and by research groups within organizations operating in the drug addiction field and in the context of scientific commissions appointed by the governments of various countries.

The Committee asked the Parliamentary Research Branch to prepare a survey of illegal drug research under way or completed in the past five years at the federal level and in the provinces and territories.² That survey, which lays no claim to being exhaustive, but offers an overview of the extent and scope of recent research, clearly shows that, despite minuscule budgets compared to those allocated in the United States, research on illegal drugs is doing relatively well in Canada. We can only imagine

² Leduc, D., et al., (2001) *Federal Research on Illegal Drugs and Related Issues*. Ottawa: Library of Parliament; and Miller Chenier, N., & S. Norris (2002) *Territorial Research on Illegal Drugs and Related Issues*. Ottawa: Library of Parliament. Reports prepared for the Senate Special Committee on Illegal Drugs. Available at www.parl.gc.ca/illegal-drugs.asp.

that it would be a formidable task to survey the studies under way in the United States on the question of illegal drugs.

Ascertaining the state of knowledge on the subject thus first meant finding the means to prepare a rigorous synthesis. To that end, the Committee adopted a research program focusing on all aspects. However, as it lacked the financial resources to produce an extensive series of studies, and also wishing to ensure that the information was broadly transmitted to the public, the Committee designed a program of public hearings of expert witnesses who would likely be able to assist in more clearly determining the state of current knowledge on the subject.

The Committee approved a research program divided into five major axes of knowledge, sub-dividing each one into specific issues:

❖ *The socio-historical, geopolitical, anthropological, criminological and economic issues of the use and regulation of cannabis.* This axis of work will establish the context for a better understanding of modern practices in the production and use of cannabis. The main questions are:

- What are the key historical patterns in the production, use, consumption and circulation of cannabis?
- Is there a relationship between cannabis use and religious or cultural practices?
- What are the relationships between the production, use, consumption, and circulation of cannabis and the socio-demographic characteristics of populations? More specifically, what do we know about cannabis users?
- What are the key domestic and international drug routes and how are they related to national and international political and policy issues?
- What are the relationships between various drugs and how have current distinctions between licit and illicit drugs been created?
- What are the relationships between the production, use, consumption, circulation and regulation of drugs and criminality?
- What are the key economic issues in the production, use, consumption, circulation and regulation of cannabis?

❖ *The medical and pharmacological aspects of the consumption, use and regulation of cannabis.* The use of cannabis for medicinal purposes occupies an important place in current debates on regulatory systems governing it. The idea here is to produce state of the art reviews on knowledge related to the physiological and psychological effects of various drugs. The key research questions are:

- How has cannabis been used for medicinal purposes?
- What is the state of knowledge on the therapeutic properties of cannabis?
- What is the state of knowledge on the physiological effects of cannabis, especially in respect of addictive capacity?

- What is the state of knowledge on the psychological effects of cannabis, especially in respect of dependence?
 - What is the current state of knowledge on the effects of various forms of treatment for dependence and addiction problems, their impacts and their costs?
- ❖ *The legal aspects from a national perspective.* Federal legislative mechanisms exist in Canada to control the use, consumption, production and circulation of drugs, even though treatment and other areas, for example, are under the jurisdiction of the provinces and territories. Additionally, the courts have interpreted the relevant acts and regulations, particularly regarding policing powers. Overall, this section will examine the legislative and control arsenal, its rationality and objectives, from the standpoints of criminology, law, history, sociology and economics. The key questions guiding this third axis of the research program are:
- What are the history and logic to the different regulatory and control modes of cannabis in Canada?
 - What are the history and logic behind criminalization and penalization in Canada?
 - What is the state of case law in respect of the legislative and regulatory arsenal relating to the production, use, consumption and circulation of drugs in Canada?
 - What is the state of case law on police powers and sentences in relation to drug issues?
 - What are the effects of criminalization and penalization in matters of drugs on the justice system (and its various components), the prison system and the criminal careers of delinquents?
 - What are the economic and social costs of the various modes of regulation, control and criminalization in matters of drugs?
 - What are the relations among justice and public health policies and government departments in matters of drugs?
- ❖ *The legal and political issues in an international perspective.* Canada is a party to various treaties and conventions on the production, trafficking and possession of psychoactive substances. It was important to assess how precise and binding these instruments are on domestic legislation. Also, these treaties and conventions are themselves part of a larger array of international instruments, especially on human and political rights; it was essential to determine the interrelationships between these instruments. Finally, drugs are an issue in international relations, in particular in relations between Canada and the United States. Although not legally binding, these factors may influence policy reorientations and will thus be interesting to look at. The key questions are:

- What are the main treaties and conventions in matters of drugs, their history and their provisions?
 - What constraints, if any, do these treaties and conventions impose on Canada?
 - Beyond treaties and conventions, what other aspects of international relations have implications for Canada in adopting a regulatory mode in matters of drugs?
 - What are the regulatory approaches adopted by other countries, what are their impacts, and to what extent are they pertinent for Canada?
- ❖ *The ethical issues and Canadians' moral and behavioural standards.* Ethical issues and knowledge of the standards adopted by Canadians are also relevant in determining policy and legislative orientations. The key questions are:
- What are the ethical principles relevant to examining issues related to the production, use, consumption, circulation and control of drugs?
 - What are the pertinent ethical principles in relation to the medicinal use of cannabis and the medical and psychological treatment of drug addictions and dependence?
 - What are the current norms of behaviour of Canadians in relation to cannabis production, consumption, use and circulation?
 - What are the norms of tolerance of Canadians?
 - To what extent do ethical principles and norms of tolerance in the population accord?

As can be seen, the undertaking was a vast one. In an attempt to answer these questions in the most effective and most economical manner possible, the Committee agreed to perform two tasks concurrently: conduct a research program and hear expert witnesses—complementary activities.

Research program

Lacking both a research budget that would have enabled us to commission studies and a full-time research staff, we asked the Parliamentary Research Branch to produce syntheses and analyses of the relevant literature.³ The research is divided into three major categories:

³ A complete list of the studies produced by the Parliamentary Research Branch is provided in Appendix 3. All the research reports are available on line at the Committee's Web site: www.parl.gc.ca/illegal-drugs.asp. The Committee wishes to express its appreciation of the work performed for it by the Parliamentary Research Branch.

- ❖ Legal studies: analyses of case law and international conventions and treaties;
- ❖ Socio-criminological studies: analyses of the relationship between drugs and crime, of developments in denunciations, charges and sentences; cannabis use practices; economic aspects of drugs;
- ❖ Comparative studies: syntheses of public policies in certain countries.

We also received a synthesis of the literature on the physiological and psychological effects of cannabis.⁴ Lastly, we commissioned a qualitative study on Canadians' opinions and attitudes by a public survey firm.⁵

In all, the Committee received 23 reports and benefited from summaries of work conducted in other countries, particularly through its attendance at international conferences.

Expert Witnesses

Aware of the research program's limits, and particularly of the need to question some of the researchers whose work was cited in the studies conducted and to compare their analyses with those of other researchers and with the positions of other expert organizations (police forces, for example), we conducted a series of hearings of expert witnesses in Ottawa and certain other cities across the country.⁶

The hearings began on October 16, 2000 during the 36th Parliament and resumed on April 30, 2001, during the 37th. They ended on June 10 of this year with presentations from the principal departments responsible for illegal drug policy in Canada. As far as possible, the Committee maintained a rate of one hearing every two weeks.

In every case, the Committee asked the witnesses to prepare a written brief responding to specific questions. The Committee did not expect the experts to give their opinion or tell it what to think. The expert witness hearings were part of an effort to increase members' knowledge. Knowing that our ability to conduct studies was limited and acknowledging that research data were incomplete, if not contradictory, we wanted to take full advantage of this exceptional opportunity to clarify and better disseminate certain findings.

⁴ Wheelock, B. (2002) *The Physiological and Psychological Effects of Cannabis: A Survey of the Literature*. Document prepared for the Senate Special Committee on Illegal Drugs. (The Committee particularly wishes to thank Senator Rossiter, who made the preparation of this paper possible.)

⁵ Léger Marketing (2002) *An Exploratory Study Among Canadians on the Use of Cannabis*. Montréal: author. Report prepared for the Senate Special Committee on Illegal Drugs. Available at www.parl.gc.ca/illegal-drugs.asp.

⁶ A complete list of the witnesses heard as well as subjects, places and dates is provided in Appendix 2. All the evidence and certain supplementary documents provided by witnesses are available on line at the Committee's Web Site.

Who were these experts? How did the Committee select them? These are important questions to the extent that a certain number of stakeholders questioned the Committee's credibility as a result of certain choices it made. First, we wanted to cover each of the major fields of investigation. Consequently, we heard sociologists and lawyers, psychologists and physicians, police officers and criminologists. Second, we wanted to hear as many Canadian experts as possible from those various research areas. Third, for the most part, we selected experts known for their publications in the field. The researchers included Professors Harold Kallant and Marie-Andrée Bertrand, who were closely involved in the work of the Le Dain Commission 30 years ago and researchers closely associated with such major institutes as the Ontario Centre on Mental Health and Addiction (the former Addiction Research Foundation) and the Canadian Centre on Substance Abuse. Lastly, we were interested in inviting experts who, in certain cases, could speak on behalf of major institutions such as the Canadian Medical Association, the Federation of Canadian Municipalities, the Canadian Association of Chiefs of Police and the Royal Canadian Mounted Police. It will be seen from a close look at the list of experts heard and the subjects of their presentations that they coincided with all our areas of concern.

When the hearings focused on the situation in other countries, we sought to strike a balance between those persons who could describe public policy and researchers whose work was recognized in their country and internationally. As the number and length of our hearings were limited, we had to make choices. At most we could hear four persons per hearing. As a general rule, we tried to choose a senior government official and three researchers.

One could also question our choice of countries heard: France, the Netherlands and Switzerland. We had initially intended to hear representatives from England, particularly because that country's public drug policies have been examined in many high-quality studies. Unfortunately, changes under way in there prevented us from holding those hearings. Similarly, we did not have enough time to hear from Sweden or Australia. However, we had the Parliamentary Research Branch prepare syntheses on each of those countries.

The case of the United States deserves particular attention. Chapter 20 describes American drug policy. However, at our hearings on the United States, which is much more complex and less monolithic than is often thought, we were unable to hear from those responsible within the U.S. government, although not for lack of trying. The Director of the prestigious National Institute on Drug Abuse (NIDA) had tendered his resignation a week before the scheduled date of the hearings, after accepting our invitation. And the Director of the Office of National Drug Control Policy in Washington declined our invitation. In short, we are dissatisfied at having been unable to hear the senior officials responsible for drug policy in the United States. Nevertheless, on June 10 2002, we held a private meeting with Dr. Hanson, the new Director of NIDA, and on June 11 we had an *in camera* meeting with Mr. Walters, the Director of ONDCP and some of his key advisors in Ottawa.

In all, the Committee held more than 40 days of public hearings in Ottawa and other Canadian cities, hearing more than 100 persons from all backgrounds.

One further note. It can be said that we did not handle the testimony of researchers and those of practising experts in the same way. That is true in part. To the extent that researchers presented data lending itself to critical review, containing verifiable data, which does not mean proof, on specific subjects, making it gradually possible to answer our empirical questions, we attached a certain degree of importance to them, which will be reflected in the passages cited throughout this report. The information from practitioners is not in itself any less significant or important in our view. However, the practitioners more often tended to express opinions than to present study data. They also did not have the same concern to give precise answers to the questions put to them. Those opinions are important, as are those of the Canadians whom we heard and who wrote to us, but they are nevertheless opinions, not cold hard data.

The challenge of synthesis

Faced with this massive amount of information, the greatest challenge was to synthesize it. The scientific literature on all of the topics addressed, particularly those concerning the effects of cannabis and users and types of use, is abundant. Experts reported to us on their research and that of other researchers. The reports prepared at our request are full of information, and our research team stayed on the look-out for recent publications and attended various international scientific conferences. In short, the task was to make sense of all this data, which, in addition, contained contradictory information at times.

At the same time, the data on certain subjects are still fragmentary. This is the case of data on trends in the use of cannabis and other drugs in Canada (Chapter 6), on the specific nature of therapeutic applications of cannabis, evidence of which often does not go beyond the anecdotal (Chapter 9) and simply on police practices (Chapter 14) or the decisions of Canadian courts (Chapter 15).

Synthesizing this information thus also meant making choices. While fully respecting the diverse range of perspectives, we nevertheless had to draw conclusions, accepting that some of the conclusions might be preliminary and that they might be contradicted by subsequent research. It is in the very nature of science that it is constantly in motion, and we accept that state of affairs. As a result, we are aware that we have left ourselves open to criticism. So much the better, we might add, first, because criticism will stimulate public debate, second, because it will undoubtedly pique the curiosity of researchers, who will verify some of our findings empirically, thus improving the state of our present knowledge, and, third, because our choices will be made plain in light of the guiding principles that are outlined in the next chapter.

TAKING OPINIONS INTO ACCOUNT

Public opinion is hard to grasp, first, because it does not exist in itself but is created by the manner in which the pollsters' questions are asked, by the manner in which the media report a debate, and by a broader context of representations the actual determinants of which are never precisely known.

Understanding public opinion on a complex subject such as drugs is not a simple matter such as discovering what type of laundry detergent respondents will buy at the supermarket. A seemingly simple question quickly becomes complex once Pandora's box is opened. A public opinion poll may ask the public whether they are in favour of decriminalizing cannabis. However, do we know whether every respondent understands the term "decriminalization" in the same way? The complex nature of this term is addressed in Chapter 21. Do we know whether respondents are for or against decriminalization for the same reasons? And once it has been determined that a majority is for or against it, do we know how that public policy choice would be implemented?

If it is the case, taking opinions into account is a necessity in a democracy. For us, taking opinions into account meant we had two closely related responsibilities: first, it meant we had a duty to inform, indeed to educate, although we hope those who are offended by that term will pardon us for using it, but we are convinced that on public policy topics, which are societal issues, it is the duty of political leaders to transmit information that educates, not merely convinces. The level of knowledge about drugs, even about cannabis which is the best known drug, is often limited and wrapped up in numerous myths. Our second responsibility in taking public opinion into account was to go and discover it. We did so in three ways.

First, we publicized our work as widely and as openly as possible to enable everyone to learn about it and react to it. Many chose to do so by writing to us, although they were relatively few compared with the number of people in this country.

Second, we commissioned a qualitative public opinion study. The focus groups conducted across the country as part of that study are described in detail in Chapter 9.

Third, we held public hearings in various cities across the country (eight in all), thus enabling a certain number of citizens to come and tell us what they thought, what they knew and what they had experienced.

We are aware that informing and seeking public opinion also means having a hand in forming it. It is thus not a neutral activity.

INTERPRETING IN LIGHT OF PRINCIPLES

All this knowledge, in the form of research and public opinion, still needs to be interpreted. Scientific knowledge is subject to constant verification. It at times contains

contradictions, as will be seen in Chapters 7 and 8 in particular. Knowledge of public opinion necessarily remains fragmentary and evolving. Thus the importance of interpretation.

Beyond this, a public policy, as noted above, is not based on knowledge alone, no matter how rigorous. Guiding principles are necessary, principles that can permit an informed interpretation of data and assist in the establishment of conclusions. This is the subject of the next chapter, which will describe the method we used to determine our guiding principles and the principles themselves.

CHAPTER 3

OUR GUIDING PRINCIPLES

What should public policy on illegal drugs consist of, policy here being understood in the strict sense of the word, as government through public debate and not party politics? As we are part of the Senate of Canada and therefore of Parliament, and having legislative authority, one might wonder why we ask ourselves the question. As legislators, are we not guided by the principles of good government, that is to say by public interest? In fact, what is public interest, and how is it determined? Does our position as Senators give us the *de facto* ability to say what is, or what should be, in the interest of Canada? We do not believe so.

When faced with social issues such as illegal drugs, we are like all Canadians, struggling with our beliefs, our knowledge, our values, our doubts and our myths. Our special access to some one hundred expert witnesses, our reading of numerous research papers and our discussions with dozens of people across the country have forced us to confront our preconceived ideas and images about drugs and to compare them with those of “others”, and if not to change them, at least to refine them along the way. However, this is not sufficient to determine what is in the public interest. Experts, no more so than the many citizens we heard from, do not determine what is in the public interest. Studies show only the most superficial aspects of what Canadians think. In addition, when polls that are more sophisticated provide us with a more in-depth picture of public opinion, we will be no further ahead in trying to decide on the direction that public policy on cannabis should take. This is primarily because the greater good is not determined by polling to see which way the winds of public opinion are blowing, and also because, as is the case with our personal opinions, public opinion relies on unverified information, on preconceived ideas that are sometimes biased, and on values that are not always clear.

We heard quite frequently that the public policy decisions should be based on the future of our children, on the kind of society in which we wish to live and that we wish to leave them. Over the last two decades, Canadian society has implemented costly anti-smoking programs. Do we want to be in conflict with these by allowing the smoking of cannabis? Cannabis is a psychoactive substance that can impair certain cognitive abilities linked to learning in young people. Do we want to send the message that it is okay for them to take drugs?

Others said that the fundamental values of Canadian society, values of respect for people's rights and freedoms, of tolerance and openness towards diversity, were compromised by existing legislation on cannabis. They added that these laws are no longer in step with society, reflecting an inter-generational conflict between adults and youth, they bring about more harmful consequences than good, and on top of being ineffective they are iniquitous.

This is an issue of values, therefore, which opposes various ideas about public health, of community health, meaning both the physical well-being of people as well as of the entire community, of its moral fiber as well as the model of inter-relationships that it proposes. However, we do not all share the same values.

In the fragmented, disillusioned world in which we live, a world open to the sharing of cultures and of identities, albeit not always by choice, the issue of values is constantly at stake, and from this the very meaning of social life. Even the transcendental values that we all share, of sacred respect for life and of immanent justice, are not readily turned into public policy: abortion or capital punishment, for example. As for other values, such as freedom, truth or law, they are the subjects of constant debate in democratic societies and they are precisely the kinds of values that are at stake in a public policy on illegal drugs.

It has now been thirty years since the Royal Commission of Inquiry on the Non-Medical Use of Drugs, the Le Dain Commission, named for its Chairman, studied issues similar to those we are studying today. Its report on cannabis, whose scientific conclusions on the effects of the drug were generally accepted by all members of the commission, nevertheless led to ... three reports: a majority report by three of the members, and two minority reports. During our first day of public hearings, Professor Line Beauchesne presented the fundamental differences of opinion among the members:

The dissension stems primarily from different visions of the values that should underlie a drug policy. I will refer to the report to illustrate the three positions that can be taken on drug use.

The first position, based on legal moralism, is that advocated by Ian Campbell. This public policy approach founded on legal moralism justifies the current prohibition and resulting repression on the grounds that it protects common values. (...) Briefly put, the government is perceived as having the responsibility of establishing common values, which are then imposed on society with a view to achieving optimum social harmony. If everyone thinks the same way, then there will be fewer problems.

(...) The second position, held by the majority of the Le Dain Commission members, is based on legal paternalism. Public policy based on legal paternalism justifies current prohibitions on the grounds that the State has a responsibility to protect non-independent persons, particularly young persons.

(...)

When we come to the third position, that taken by Marie-Andrée Bertrand advocating the legalization of cannabis, this brings us around to the whole question of values (...). Legal liberalism implies that the government maintains some responsibility for preserving individual autonomy to the maximum extent possible. (...) A public drug policy based on legal liberalism is founded on the premise that the

*government's role is to maximize opportunities for each individual to be a full citizen and to ensure that criminal law is never used.*¹

Moralism is an affirmation of a set of shared values. Paternalism is protection of the weak. Liberalism is maximization of the independence of citizens. These three categories do not include all of the possibilities: communitarianism, for example, represents another approach. In some areas of public policy, at certain times, these various approaches can co-exist. Nevertheless, each one expresses a different concept of the role of the State and of criminal law, and the roles of science and ethics in the choices that must be made.

Having examined each of these subjects, we have elected to set down the guiding principles that clarify the concept we have of the roles that the state, criminal law, science and ethics must play in the development of a public policy on cannabis. These principles will then help us in our analysis of the information resulting from the research and current practices in Canada, and most of all, influence our recommendations. In this way, the reader will have the benefit of our attempts to make explicit the principles which all too often remain implicit, therefore giving the opportunity to all to take us to task for inconsistency, or to voice their disagreement with our conclusions, because they do not share these principles. We feel this exercise has the virtue of being both clear and transparent.

In order to assist our preparations for this work on the guiding principles, we asked four Canadian academics, well known both in their respective fields and for their independence, to prepare issue papers on each of the four main themes: governance, criminal law, science and ethics.² We strongly encourage Canadians to read these texts, which are of an exceptional richness and quality. We will use these texts freely, without pretending to render the complexity of their thinking, but neither will we simply echo their sentiments. Just as we did not ask witnesses to tell us what to think, but rather to share their knowledge with us while being as rigorous and as precise as possible, whether their knowledge comes from research or from experience, so we asked for issue papers and not for answers to our questions. We must formulate our own responses to the illegal drug issues before us, and that is what is expected of us.

We will begin with a reflection on ethics. We feel that such an examination, insofar as it affects the very bedrock of our values, as it imposes a requirement for

¹ Professor Line Beauchesne, witness appearing before the Special Committee on Illegal Drugs, Senate of Canada, Second session of the Thirty-sixth Parliament, October 16, 2000, Issue 1, pages 33-36.

² They are: R. Macdonald, Professor of Public and Constitutional Law, McGill University, *The Governance of Human Agency*; A.P. Pires, Professor of Criminology, University of Ottawa, *Legislative Policy and "Two-Sided" Crimes: Some elements of a pluridimensional theory of the criminal law*; T. de Koninck, Professor of Philosophy, University of Laval, *The Role of Knowledge and Culture in Public Policy on Illegal Drugs*, and J.F. Malherbe, Professor of Social Work, Université du Québec à Montréal, *The Contribution of Ethics in Defining Guiding Principles for a Public Drug Policy*. These texts are available on line at: www.parl.gc.ca/illegal-drugs.asp.

communication and dialogue³, is the cornerstone upon which the other guidelines are based. Our principles dealing with governance – that is to say the role of the State – and with criminal law as a tool for achieving social conditions, then, hinge on this ethical concept. We will conclude with thoughts on the role of science, or more specifically of knowledge.

ETHICS, OR THE PRINCIPLE OF RECIPROCAL AUTONOMY

Let us assume that science, with supporting evidence, had shown the harmfulness of a given drug – say tobacco – and that it is a “cause” of serious, indeed fatal illnesses. To what extent are doctors, judges, and in the end, the State, authorized to go to ensure that people do not smoke? What limits are there on intervention? This is the question posed by ethics, more specifically the ethics of “health”. Should we simply ban tobacco and punish both its users and its producers? Should we educate people through prevention campaigns? Should we discourage smokers through their pocketbooks, for example with a surtax for the hospital care that their habit could make necessary?

We see that ethical reflections take us through what is, through the realm of facts, to the realm of what should be, of what would be desirable. Moving therefore from recognized facts (that cigarettes “cause” lung cancer) to standards (the majority recognizes that smoking is harmful), but, more important than standards, to values (health is the greater good) and finally to the means of passing on and above all implementing these values (smoking is forbidden and subject to a fine). At any of these steps, one could speak out and say just a minute, I do not agree. I do not agree with the statement of fact: what is the basis of, what studies support this “finding”, one might ask. I do not agree with the standard: even though a public opinion poll may show that most people believe cigarettes cause lung cancer, is that reason enough to put an end to the debate? I do not agree with the established values: freedom is the greater good and not health - what is the use of being in good health under a totalitarian regime? Finally, disagreeing with the means chosen to implement the value - it being unacceptable to

³ On this subject, see the work of the German sociologist and philosopher Jürgen Habermas, particularly *De l'éthique de la discussion*. Paris : Cerf. The author presents the process of ethical discussion as follows: Through debates, all participants must acknowledge that, in principle, each person participates fully, freely and equally, in the cooperative search for truth in which the unlimited strength of the best argument will carry the day. Practical discussion is considered as a demanding form of argumentative training of the will, which (...) must guarantee, through the universal presuppositions on communication, the fairness of all possible normative agreements negotiated under these conditions. (...) Furthermore, practical discussion is considered to be a process of inter-comprehension in which, due to its own nature, all participants ideally adopt a role. Therefore, the individual and ideal adoption of a role played by each person in particular and *privatim* is transformed into a practical public operation by all, intersubjectively and in common. (pages 18-19).

ban cigarettes under the pretext that they cause cancer because the means is disproportionate to the fact.

Anyone who has followed the debates on cannabis to any degree will have drawn a parallel. Because cannabis “causes” health problems (both physical and moral), the standard states that its use is “dangerous” and, under the banner of public health values (and of the protection of the most vulnerable: children, adolescents, etc.), its production, manufacture, sale and use, etc. will be prohibited. This is the basis of the existing public policy.

As Professor Malherbe reminds us, this way of setting out the cannabis problem – as in fact is true for other substances – encourages us to rethink our ideas on health, medicine and science. Moreover, going one step further, it obliges us to consider the issue of risk and of life itself in society.

We live in a risk-taking society, but in a paradoxical manner. On the one hand, we place great value on risk-taking: venture capital, risk management, putting no limits on success. We see this as much in the appreciation of certain kinds of political or corporate decisions, as in the emulation of certain kinds of risky activities, such as Formula 1 racing, paragliding, and other extreme sports. On the other hand, we are becoming intolerant of risks of life in society, of the risks that others represent to our individual lives. It is a search for safety, both individually and collectively, vis-à-vis the smalltime crook or the terrorist. Risk would be in conflict with safety and security as illness would be in conflict with health.

Between these two apparently opposed attitudes towards risk, a subtle change in connotation slips in and partly explains the paradox. In the first sense (risks we like to take or will accept others taking), the issue is clearly risk. Here, risk is seen as being positive, and offers a number of options: when faced with this kind of risk, the person can decide to forge ahead, to wait, or to give up. In any case, there is a broadening of possibilities, therefore of autonomy, an extension that is no doubt linked to the admiration these people elicit, which is also tinged with envy as we observe this action that our position as “mere mortals” rarely permits us. The shift in meaning happens with the second sense, which does not relate to our ideas on safety but rather of danger. Safety is a collective and individual good, as in food or occupational safety. Danger, on the other hand, is usually a loss or a limitation of freedom of action: when faced with danger, most of us stop, and withdraw from the scene. In this sense, danger reduces the range of autonomy. Therefore, it is not safety that is in conflict with risk, but rather danger.⁴ The distinction is fundamental, because it refers us to the degree—whether real or perceived—to which we control our own existence. We sense that the “crazy Canuck” bombing down the slopes is at least in relative control of the risks he is taking; danger is different in that it implies loss of control.

We are collectively learning how to manage this risk/danger equation. The “risk” here, if one can put it this way, is thinking of risk as a kind of acquired individual

⁴ There is an interesting discussion on the subject in Professor Pires: pages 41 passim.

autonomy, and of danger as a limitation of this very autonomy by “the other”, bringing about in its wake withdrawal, intolerance, and concisely, fear. For if risk is the source of intense pleasure, danger generally gives rise to fear. If risk points to the improvement of the means that allow me to be more in control of my safety, danger points to threats coming from the outside, chiefly from the ‘other’, over which I have little control.

Some concepts in medicine, and in science in general, add to this paradox when they address risk factors, such as when smoking is considered a risk factor for lung cancer. This is also the case with delinquency: dropping out of school is a risk factor as regards delinquency. Within these meanings, risk here becomes a danger factor, the ultimate danger, of course, being death (cancer). This mechanistic and causalist concept of prevention erases the fundamental difference between the body-machine we occupy and the body-subject we are, to use the distinctions proposed by Professor Malherbe. There is, in fact, no direct link between the “objective” characteristics of our environment (including the personal traits of genetic history, family and culture, etc.) and the subjective perception we have of ourselves and of our relationship with our environment. In other words, it is precisely why two children born in a similar environment, in the same era and friends from a very young age, will take two entirely different paths in life. We have a body with a genetic inheritance and pre-dispositions; what we do with it and how we interact with others and our environment is something else entirely. Just as there is no immediate transfer of the recognized fact to the norm, neither is there any direct translating my biopsychological make-up into actions and thoughts.

The scientific approach searching to identify a statistical “norm” – the correlation between two facts – does not take into account the fact that we are not all equal in the face of this risk/danger equation. What for some would constitute a risk – going down an icy mountain on skis – would represent a real danger for another.

[Translation] *Despite all we think we know about addiction, a considerable number of well-informed subjects “happily continue committing suicide” through their dependencies. While health education is largely thwarted, and not only in the field of toxic substances, it is because human subjects are in fact subjects, that is to say “subjective” beings whose behavioural reactions are linked much more to the meaning they attach to their behaviours than to the objective mechanical-medical consequences which statistical analysis claims to define.*

Some risks are no doubt worth taking for life to be worth the trouble of being lived, for it not to dissolve into a maniacal and fearful sequence of endless precautions (...). Lastly, what is most human (the most autonomy, we dare wonder): succumbing to fearful hypochondria and enclosing oneself in a cocoon of universal prevention (to the point of death by asphyxiation and loss of will) or living one’s life through risks freely chosen and accepted.⁵

This is where the central position of the concept of autonomy comes in. Autonomy, however, is to be understood here in a critical manner as *reciprocal autonomy*,

⁵ Malherbe, J.F. (2002) *op. cit.*, page 7.

and not as autonomy where isolated individuals establish standards to their own liking. It should be borne in mind that autonomy, etymologically speaking, means “establishing one’s own laws”. This is not a question of arbitrary legislation, created for oneself, but of laws that permit, whenever possible, the successful interaction with others, which is the very bedrock of society. This autonomy is based on the ability to recognize the existence, the difference, and the equivalence of the other, allowing one to assume solitude, finiteness and uncertainty, respectively, to then move on to practice solidarity, dignity and liberty in return.⁶

The “dependent” person is not autonomous, some would say. Indeed, in their dependency, the drug addict, the alcoholic and the inveterate smoker are not. Neither the emotionally dependent person nor the person addicted to gambling, money or sex is fully autonomous. Next comes the question of the extent to which the state or society can intervene to encourage the slow achievement of this autonomy, and how to go about it. What are the respective roles of collective governance and criminal law as mechanisms of this governance? How can science contribute to this emancipation?

In any case, we note Professor Malherbe’s comment, that:

*[Translation] (...) the fundamental problem of our civilization is not whether it is acceptable to prohibit the trade in cannabis derivatives or even their use, but rather not to repress the expression of anxiety when it arises and, even better, to invent new ways of taming it. On this point, it is useful to recall that every unjustified restriction, which adds to the already heavy burden of civilized individuals, can only increase their sense of being the object of some form of totalitarianism rather than the subject of their own destiny. From this standpoint, anti-drug campaigns seem decidedly like attempts to deny death rather than recognize its presence in collective and individual life. (...) In this respect, we agree with N. Bensaid, who says that preventive medicine conceals our fear of death by making us die of fear.*⁷

From this base ensues a definition of ethics as “constant work, to which we can consent and which we perform with one another in order to reduce, as far as possible, the inevitable difference between our values as practiced and our values as stated.”⁸ With one another, indeed, thereby imposing constraints so that reciprocity and equivalence of the ‘other’ can be realized; this is the role of governance.

As a guideline, we will adopt the principle that an ethical public policy on illegal drugs, and on cannabis in particular, must **promote reciprocal autonomy built through a constant exchange of dialogue within the community.**

⁶ See Malherbe’s discussion of the subject on pages 23-26.

⁷ *Ibid.*, page 21.

⁸ *Ibid.*, pages 27-28.

GOVERNANCE: MAXIMIZING THE ACTIONS OF INDIVIDUALS

We are social beings. It is a trivial assertion, however it must be stated because it means that, *necessarily*, we always find ourselves in paradoxical situations where to a certain degree, each person has the free will to make decisions, and makes free decisions for himself, while at the same time, in order to regulate interactions with others, rules are established, a normativity, that is more or less complex or more or less formal, as is appropriate. This is true of relationships between couples, families, in sports, and at work, as it is of relationships between citizens and the government. Self-governance – acquired through the arrival of liberal democracy – is never complete and inevitably yields in part to the governance of the community.

Governance is relatively easy to develop within simple relationships: within couples, families, or businesses. This is not to say that its practice is easy: anyone with any experience of relationships as a couple will be well aware of how difficult it can be to make implicit rules explicit, and to agree on the rules of a shared life. However, the standards that are established between friends, between lovers, between parents and children, are in fact a set of relatively simple rules, and most importantly, rules whose effectiveness does not require the intervention of other parties, except in the case of a break-up or of abuse.

In feudal, pre-modern or pre-democratic societies, the prevailing rules for even the simplest social relationships were stipulated from the outside: by the sovereign, the lord, the church representative, the father or forefather, the head of the business, each one could issue orders and expect to be obeyed, being all powerful in his domain. The establishment of normativity was largely done without the involvement of “subjects”, without their consent, and without any input on their part; they were excluded from the power relationship. Over the centuries, during which our modern-day democracies were built, we have moved on to styles of governance of ourselves and others that allow people to participate more and more in the development of the rules of life, both personal and social. We have also moved on from a situation whereby each person’s life was decided by his or her destiny, and limited to the narrow prospects dictated by the place of birth and status, to an “indeterminate” life situation, which is open to the building a personal identity and history.

These are therefore (1) changes in the sources of normativity and their operationalization in society, and (2) changes in our relationship to these norms. In the first case, we are slowly becoming involved in the external formalization of the sources of behavioural norms. As they no longer ensue from divine right, from the sovereign or the church prelate, they are built through the political manifestation of the will of the people. They are entrenched in national constitutions, in legal decisions (in British Common Law) or in legal codes (the Civil Code). It follows that the supra-legal normativity (inherited from divine right) or the infra-legal (not set out in law), lose both their symbolic value and their real influence on social relationships, to the benefit of legal rules that are registered according to a recognized and legitimate procedure in the

social system by means of statutory provisions. Modern societies are legal societies, that is to say societies that base their management of relationships between people and between individuals, groups and institutions, on the rule of law. Never completely incorporated into the legal system, other sources of normativity have not disappeared completely but the pre-legal or infra-legal sources of normativity are less apparent, and sometimes less legitimate.

With this change of source comes a change in operation: while the sovereign or the church representative could convict, or even execute, without challenge to the legitimacy or rationality of their decision – except by risking the same fate – the means of expressing the will of the people, setting it out in the legal system, is now in the hands of judges and the legal system entirely. The legal establishment of norms is set in motion either by the public authority provided in the legislation (civil and criminal cases, for example) or by citizens themselves (private and civil lawsuits) and is put in effect primarily by the courts. Remedies exist, and most importantly, these remedies are theoretically the same for, and accessible to, one and all.

The relationship that a person has to the norms, and through this to all aspects of social life, is the third change. Choice and uncertainty have both increased, to the point that, today, the connection is not so much to the other person, but to the risk represented by being in contact with them. Normativity in and of itself is no longer considered inevitable, nor even a duty. Without being rejected, social normativity is called into question based on personal experience and worldview. The gap between the subject of the norm and the norm itself seems to be widening, while conflict resolution models are being made more formal.

Through the conjunction of these processes, governance becomes more and more instrumental. The mechanisms of formal normativity, i.e. lawyers, judges and the courts, sometimes take on a greater importance than the actual substance of the norms themselves: the immediate personal question is whether I have access to the recognized mechanisms of conflict resolution, or if, through my condition or my actions, I am excluded in one way or another. In other words, the means is replacing the end, the rule of law is replacing the requirement for a connection to the other, which is the very basis of normativity and of social life itself.

Modern societies are therefore faced with a series of sometimes paradoxical injunctions. Collective governance must: (1) allow social relationships to be regulated in the most orderly but least restrictive manner possible, (2) give expression to the norms and values shared by the community and (3) give each person the opportunity to define themselves in relationship to these norms and values. How can these seemingly obvious opposites be reconciled?

Based on Professor Taylor's work⁹, we can say that there are two central spheres or preferred means of governance: the governance of relationships with others, and the governance of the self. The governance of collective relations is obviously part of the

⁹ Among others: Taylor, C., (1989) *Les sources du moi*. Montréal: Boréal..

traditionally recognized areas of intervention of the state, even if the form and substance change. On the other hand, governance of the self does not come immediately or systematically under the jurisdiction of the state.

Collective governance

The state is far from the only source of normativity. But the fact that democratic states must act in accordance with the law and that most public policies come in the form of legislative texts, produces a kind of short-circuit whereby the source of law and the state appear as one.

Yet, as Professor MacDonald rightly points out, if the actions of the state are subject to the rule of law, the legal sphere is not limited to the State. In all known societies, rules have always been established for the governance of the self and of collective relations. They are implicit or explicit, formal or informal, all-encompassing or limited in their application, codified or recorded in the collective memory, extensive or limited to certain spheres of activity. In every case, whatever the nature or specific form of the rules, they serve to express for members of the community the conditions of collective life. They deal with marriage and parenthood, the ways in which one respects the life and property of others, as well as the connections to the invisible and the beyond. They take the form of prescriptions and bans, are implemented by the bishop or the mullah, by the king or his representative, or by the judge. Much as we might like to believe, we in modern times have not invented the codification of laws because the first legal code goes back to Hammurabi, the King of Babylon. In Roman law, Justinien was the first to suggest a code of laws, not to mention the Ten Commandments “handed down” to Moses.

In this sense, we agree with Professor MacDonald as concerns legal pluralism, according to which there are multiple sources of normativity and therefore of rules of action that are not exhausted by formal legislation. This is the distinction between law and “juridicity”. As we mentioned above, juridicity can be derived as much from the family as from business, from school as from the trade union, from political parties as from religion. In this sense, juridicity “is the business of subjecting action to rules-based governance”,¹⁰

Juridicity, of course, co-exists with other ways of governing individual and community actions: the brute exercise of power and war are examples of other forms. One of the main differences, however, between juridicity and other forms comes from the nature and the origin of its legitimacy. The establishment of legal rules of action involves a form of consent, if not of active participation, in the development and implementation of the rule, qualities that are not needed nor sought out in the case of domination by a tyrant or an occupying army.

¹⁰ MacDonald, *op. cit.*, page 24 of the English version.

The development of a formal juridicity, in the form of legal texts passed by legislative assemblies prescribing both objective and subjective rights, is at the very heart of modernity. It is in fact around these kinds of issues that the more specific question of the role of the State arises: when and to what extent should formal legal rules be developed, and how should they be enforced?

Modern societies are unique in that they have, amongst other things, given precedence to the formal rule of law over other sources of juridicity as regards the governance of social relationships, established the need for these formal laws to be adopted and implemented by legislative and executive arms of the State, and set up arbitration systems in the form of courts of law born of the State but having an arm's length relationship with the former two.

This formality of the law, or to be more precise, the legal normativity found in the legislative texts passed by the State, in no way signifies the disappearance of the other forms of normativity. Here Professor MacDonald gives us a relevant example of this:

For example, activity that the official criminal law sanctions and stigmatizes may be rewarded and valued in certain other normative communities. In socio-economically impoverished neighbourhoods where economic opportunities are limited, the manufacture and sale of illicit drugs may be an attractive means of escaping poverty. For those who are successful in the enterprise, the consequent advancement in social standing may more than offset the potential harms visited by criminal sanctions. Similarly, in an international context, in countries where the raising of traditional crops which are capable of being converted into illicit drugs is an indigenous cultural activity, and where conditions of poverty are such that the attendant economic benefits are necessary for subsistence, the criminal law (whether domestic or international) has little purchase.¹¹

In other words, juridicity is not exhausted in the formal law, and the role of the State is not limited to the processes of passing, enforcing and arbitrating formal legislation.

Governance of the self

Historically, juridicity has often been equated with moral standards, or has tried to model itself on them. These standards could come from religion, from philosophy, from an ethic, or a universal theory of nature as in Plato. In every case, they tried to say what constituted the “good life”, how to conform one’s life with the immanent rules of life, ending the cycle of reincarnations, or avoiding eternal damnation. In every case as well, the good life corresponded more or less to “life” in the most abstract sense, that is to say the focus was not so much on the destiny of the individual, but on that of the community, the group, the clan.

It is only as of the second half of the second millennium, during what we refer to as the Age of Enlightenment, that individual life slowly began to register as a primary

¹¹ *Ibid.*, page 25.

concern in the governance of the community. This major change resulted in what Taylor calls “ordinary life”, that of the “average sensual man”, at the heart of which we find his connection to the world and his manner of connecting with it through the agency of family and work, being suddenly recognized. Having had no means by which to participate in the development of juridicity in general until then, the “citizen” acquired some legal authority and right to active participation (to simplify things, we could give as an example the right to vote), not only as a member of the community but as a whole and unique individual.

Up until that time, communities had a juridicity that was largely based on relationships with others, granting strong objective rights (the right to life: you shall not kill; the right to property: you shall not steal; etc.), with a weak cognitive component: while admitting that it continues (unfortunately one might add), to pose certain problems (take racial or sexual inequality) even throughout the twentieth century, - accepting respect for life as a universal norm has not met with great opposition. It is in this sense that we speak here, particularly following Pires’ work discussed in the following section, of norms with weak cognitive components. These fundamental norms, which certain philosophers of law have said are natural laws, do not require a strong empirical justification. The same cannot be said of other norms concerning conduct such as homosexuality, abortion... or taking drugs. These norms are an issue of what we might call subjective rights that relate to individual behaviours that express personal choices achieved through a consensual exchange and thus being of little or less direct concern to the community. This is why we could say this is an issue of norms with a strong cognitive component: in order to be imposed as negative laws, that is to say as constraints or prohibitions, these standards need an exogenous justification drawn from the external knowledge of juridicity itself.

In this way, parallel to the process of legal formalization of the norms of governance in the community described in the preceding sub-section, the modern individual has acquired more and more room for governance of the self. This space is no longer, as in the past, entirely dictated by the determinations stemming from one’s birth in a given place, in a given family, with given genetic “baggage”. Except in some totalitarian regimes, neither is this space for the governance of the self entirely subjected to collective or religious rules. This space consists of a vast area of uncertainty that, in part, precisely explains why it is sometimes called “disenchantment with the world”, or more prosaically “loss of sense” or “lack of values”. In fact, we would say that neither comes into play, so much as a process of slow and hesitant reinvention of social life, in and through new ways of relating as individuals.

The role of governance

Governance is part of both the spheres of collective governance of the State and of governance of the self. If the State’s chosen vehicle is formal law, the passing of legislation does not exhaust all the possibilities in terms of collective governance.

Moreover, governance of the self is the slow discovery – in the strong sense of the term – of the juridicity that underlies human action.

Professor MacDonald addresses the issue eloquently:

*How ought law and legal institutions to be deployed to achieve the symbolic governance of human agency in a manner that facilitates the just achievement of individual and collective human purposes?*¹²

The issue brings us back to the purposes of community governance, which is to facilitate human relationships and self-realization, with a minimum of interference in such a way as to stimulate individuals' discovery of the source of normativity rather than having it dictated by an external body. It is not the responsibility of State governance to ensure either the health or the happiness of its citizens. It is, however, its duty to ensure that the rules that it enacts and the way in which they are carried out do the least possible harm to the individual's ability to develop his or her own moral code. Not a single morality, or at least a morality for everyone, as the majority position of the Le Dain report maintained, but a facilitation of access to morality for citizens, morality here being understood in the sense of the ethical discovery of fundamental laws regarding relationships with others, as Professor Malherbe pointed out.

Professor MacDonald proposes a definition of governance that is drawn from the work of the Law Reform Commission, which gives guidance: the goal of governance is freedom, and not control. It is a question of defining the goals of society through policies and action programs that are then implemented through systems and processes and upheld by actors, allowing for the encouragement and affirmation of human action. The law, vehicle of choice of governance, does not seek instrumental purposes of simple expressiveness of rules or limitations passed for and on behalf of citizens, but a reciprocal process of building social relationships through which people, citizens and governments, can constantly adjust their expectations in terms of behaviour.

We therefore accept as a guiding principle for governance that **all of the means the State has at its disposal must work towards facilitating human action, particularly the processes allowing for the building of arrangements between collective government and governance of the self.**

CRIMINAL LAW AND THE LIMITS OF PROHIBITION

During the course of this report, we will have plenty of opportunity to describe the degree to which criminal law is at the very heart of any discussion of illegal drugs. It has come to the point that debates between those we refer to as prohibitionists on the one hand, and liberalists on the other, have overshadowed all other considerations. The

¹² MacDonald, *op. cit.*, page 78.

Italian sociologist Pareto (1848-1923), quoted by Professor Pires in his issues paper, said of human beings that even if we would like to believe that we are rational, we are above all argumentative beings, that is to say that we want “to give a logical aspect to behaviours that do not have the substance thereof.”¹³ In the context of the debate on cannabis, this sentiment takes on its fullest meaning: both sides hurling their arguments at the other, claiming they are recognized “truths”.

Any discussion on the role and the place of criminal law as concerns illegal drugs, here being a question of cannabis, in effect poses questions regarding principles of the appropriateness of turning to criminal law. In general, both sides are quick to escape this stringent argument on the principles to turn to justifications. As is true of both sides, justification has nothing to do with the mechanism itself, being the criminal law, but with the target, being cannabis. The result is the litany of “proofs” of the effects of cannabis. For some, the effects are significant enough to “justify” turning to the criminal law, and to list the risks associated with the use of cannabis: addiction, learning difficulties, delinquency, and impaired driving. For others, these same risks are so minimal, or are already covered by other criminal legislation (driving under the influence), that they do not justify the use of the criminal law. Whatever the case may be, the debate is no longer in relation to the principles but on justification.

This reflection on the role of criminal legislation is specifically intended to bring us back to principles of the appropriateness of turning to criminal law. The central issue is to attempt to identify the criteria that will help us decide in what circumstances society can—or must—turn to criminal law. It must then be determined if these criteria justify the use of the criminal law in relation to cannabis.

Requirement for distinctions

Raising the question as to whether or not the use of criminal law as concerns cannabis is justified necessarily brings us back to a primary observation: the use of criminal law is not justified in all cases, but, in some cases, it must be. This observation is supported by three findings: (1) that most social relationships are regulated without the use of criminal law; (2) that certain behaviours are forcibly within the sphere of criminal law; and (3) that certain behaviours legislation has criminalized, at certain points in time, have since been excluded from this domain. The possibility of including or excluding human actions from the sphere of criminal legislation rests on the ability to make distinctions.

However, a significant difficulty arises as soon as this principle of distinction is accepted *in practice*, and not simply in theory. Once an act has been recognized as being a “crime”, it becomes part of the body of what defines all offences: behaviours against society. According to the internal logic of criminal law, the only eligible distinction would *precede* the decision to incorporate a behaviour into the law or not. If the

¹³ Quoted in Pires, A.P. (2002), *op. cit.* page 8.

behaviour at issue is one that goes against the common good, it is a crime. Otherwise, it would be an uncivilized act, perhaps even an immoral one, but certainly not a crime. Once such a decision is taken, the only remaining distinctions to make would be with respect to form: the kind of procedure to follow and the severity of the punishment according to the nature of the offence.

Everything is done as if there were no positive distinctions made within criminal law between offences, as if the distinction was made only from the outside, before making the act an offence. In fact, distinctions between types of offences do exist. These are the distinctions made by Professor Pires, between standard prohibited behaviours and “two-sided” prohibited behaviours. It is more usual to distinguish between “victimless” crimes and crimes “with victims”, but this categorization is incorrect. On the one hand, under criminal law, the victim is all of society. There are certainly individual victims, but by some kind of extension, the harm has in fact been done to all of society. This would explain the principle of deterrence, in criminal legal theory: by punishing a guilty party, we try to dissuade all those who might be tempted to behave in the same way.

On the other hand, this categorization brings us back to a single aspect, the subject of the offence, losing view of the other processes by which criminal law distinguishes between different kinds of offences. In this way, another kind of distinction that is intrinsic to criminal law falls under the modes of justification. A decision to criminalize homicide does not require, as Professor Pires stresses, the undertaking of comparative studies in order to determine if one kind of murder is more or less harmful than another to the victim. The cognitive component is weak: here, there is no need to turn to external arguments to justify the criminalization. The act, in and of itself – this is the concept of *malum in se* – is enough to establish the legitimacy of the criminal standard. There is no such thing when the issue is drugs: since the beginning of prohibition, external justifications were needed regarding the harm caused by drug use. These subjects of criminalization have a strong cognitive component, in that they require a higher level of justification.

The distinction between kinds of prohibitive behaviours is therefore an analytical tool that is necessary in order to understand and think about the role of the criminal law as concerns drugs. What then are the criteria we can use in order to make these distinctions? This is the goal of the following sub-section.

Criteria for distinction

Professor Pires proposes seven criteria allowing for distinctions to be made between the various kinds of prohibitive behaviours in criminal law.

Seven criteria to distinguish between offences	
Nature of the offence	Is this an issue of a conflict or an exchange?
Capacity of the law for discernment	Can the law see a victim and distinguish them from the deviant?
Referentiality	Is the actor able to appreciate the consequences of his actions on another person?
Limitation on natural liberty	Is it possible that there could be limitation of the freedom of the person to act?
Justification of the offence	Must the law turn to outside knowledge in order to justify the enacted standard?
Application of the law	Does application of the law require any active intervention?
Effects of the law	Can the effects of applying of the law compromise the standard?

We will briefly examine these, one at a time.

The nature of the offence

In order for there to be an offence, harm must have been done, which brings us to the victim. As we said above, in the broadest sense, criminal law sees society as the ultimate victim of any offence. The direct victim of an assault or theft is a witness, in the technical sense of the law. However, at a concrete level, the law recognizes direct victims. In certain cases, the concept of victim falls somewhere between the two: it is the neighbourhood or the surrounding area, for example, in the case of nuisance caused by solicitation for the purposes of prostitution. However, these nuisance situations are themselves at the limit of criminal law, in a sort of gray area between standard offences and two-sided offences.

What is remarkable is that the criminal law cannot take all three levels into account at the same time. If it recognizes the direct victim, then society becomes invisible. If it considers the neighbourhood, it becomes even more evident that it can no longer recognize a direct victim or society as a whole. Finally, and above all, if it takes the perspective of society as a whole, then it loses sight of not only the direct victim, but what is more, it loses its specificity. In effect, in the latter case, one could say that civil law also protects society: without respect for sales contracts and debts, society would go down the drain.

It is therefore not only the harm caused, nor even the presence of a victim that gives certain acts their criminal character, but the fact that they bear witness to conflict, abuse of power, infringement of one social actor upon another. Obviously, civil law also serves to resolve conflicts, from which comes the need for more criteria.

Capacity of the law for discernment

Is the law able to differentiate a victim from a perpetrator? In the case of standard prohibited behaviours, it generally can. For example, the victim of a homicide can clearly be distinguished from the perpetrator. Of course, there are exceptions to these

standard scenarios, for example, where the victims themselves face criminal charges. A case in point would be where a victim of sexual assault is convicted of contempt of court for refusing to testify against her attacker.

When faced with two-sided prohibited behaviours, criminal law is hard-pressed to distinguish the victim from the perpetrator. Or, it finds the perpetrator to be the victim that must be protected from himself. Consequently the perpetrator becomes the victim of his/her own behaviour.

Alternatively, cognisant of the limitations and difficulty involved in punishing the victim - for example, a prostitute - criminal law shifts from the phenomenological world (the facts) to a different mode of reasoning. It moves from an analysis-based mode of reasoning (evidence enabling deduction) to one based on consequentialism or teleology (the goals underlying behaviour). For instance, criminal law justifies its intervention by the need to protect children. Consequently, it loses, and causes us to lose, sight of the (ultimately inexplicable) reasons why the offence was brought before the courts in the first place.

Referentiality

This term refers to the capacity of perpetrators of the offence to recognize – despite “explanations”, denial or other self-justification methods – the harm caused to others by their actions. Even in case of some borderline standard prohibited behaviours, such as cruelty to animals, the perpetrator of the offence – who, for example, has hanged his neighbour’s dog from a tree – may recognize the harm caused by his/her action to the animal’s owner. The criminal act in the case of two-sided prohibited behaviours may be self-destructive, but is not motivated by maliciousness towards others, since it does not create a direct relationship with others. Indeed, the sociologist A. Ehrenberg raises the issue of the absence of a relationship with others exhibited in all types of drug use when interpreted as a form of withdrawal from the world. However, this is already beyond the issue of criminal law into to the realm of political discussion on democracy.

Limitation on natural liberty

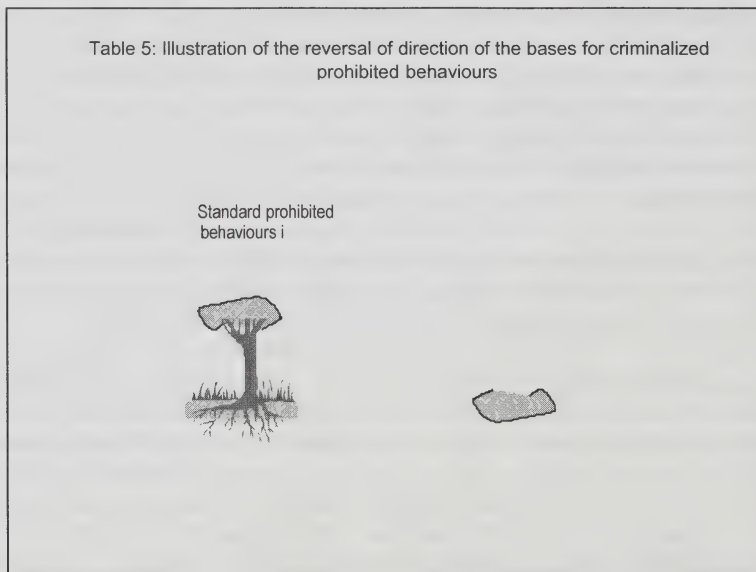
We shall deal only briefly with this issue here since it is discussed at greater length later. Suffice it to say, however, that the law places special restrictions on what Kant called the “unfettered freedom of action”: criminal law restricts an individual’s liberty to take the life or property of others. Consequently, it institutes specific rights and freedoms, i.e. the right to enjoy life and property. Fundamental problems arise where the law seeks to restrict the very rights and freedoms that it provides. A case in point is prostitution, where the law seeks to restrict the very right to enjoy one’s own body and the freedom provided for by the law.

Justification of the offence

Criminal law very seldom uses external sources to justify the criminalization of offences. A good example to illustrate this is our original homicide scenario. Criminal law does not refer to sociology, anthropology, history, economics or medicine to establish the various effects of different types of homicides and various ways of taking life. The same rationale can be applied to sexual assaults, theft, fraud, etc. The cognitive component in the justification process is weak. The rationale underpinning the standard prohibited behaviour is deeply rooted in the social relationship. It is quite clear that any society even considering legalizing homicide would become untenable and would cease to be a society at all. Consequently, our society does not question the validity of the criminalization of homicide. The sole issue that arises in some countries, but which was addressed in Canada a long time ago, is the sentence society imposes on murderers.

Quite the opposite situation exists for two-sided prohibited behaviours. They require empirical demonstration and justification with a strong cognitive component. As one might expect, this issue is central to any debate on drugs. Indeed, this report accords a great deal of importance to this matter.

Below professor Pires deals with this issue in graph form.



As professor Pires points out, the criterion here is not to establish whether there is consensus or “dissensus” on the criminal standard or on the terms relating to the type and possibility of democratic debate but rather to determine whether the source of the legitimacy of the standard is endogenous or exogenous. In the case of standard

prohibited behaviours, the source is endogenous. In the case of two-sided prohibited behaviours, it is exogenous. However, the criminal law creation process remains the same, i.e. democratic debate resulting in the adoption of enabling legislation. It is for this reason that it is all too easy to lose sight of the fact that the two types of offences are not in fact of the same nature.

[Translation] *The important point to remember is that all two-sided prohibited behaviours to which this criterion applies exhibit certain specific problems. (i) They all have a more precarious, more ideological or more fragile endogenous basis because they are not rooted in a concrete, conflictual deviance and because the norms are not sufficiently detached from certain forms of (purely moral or religious) knowledge or are not sufficiently unaffected by knowledge of facts. (ii) They are therefore more subject to a process of selection from the available knowledge and to the actual value of the knowledge that we select or that is available to us in respect of them at a particular point in time. That means that a critical and serious examination of the knowledge is of crucial importance. (iii) They are, to all intents and purposes, more polemical and subject to public debate at a particular point in time, and more likely to be based on major cultural or cognitive misapprehensions.*¹⁴

Application of the law

In the vast majority of cases involving standard prohibited behaviours, offences are brought to the attention of the police by way of a complaint. Complaints to the police most often involve theft, sexual assault and homicide. Indeed, approximately 90% all offences that come to the attention of the police do so through complaints. In the case of two-sided prohibited behaviours, close to 100% of offences are discovered pro-actively.

One might point to the increase in complaints from people living near cannabis plantations in British Columbia. However, these people's complaints perhaps deal either with the very real danger of fire – since the illegal nature of cannabis production forces producers to illegally tap into electricity lines – or with pressure on them from criminals to keep quiet – also because producers are forced to operate illegally.

The pro-active application of the criminal law in the case of two-sided prohibited behaviours has harmful consequences, including social and human costs but also the possibility of discriminatory application of the law or police corruption. This raises the question of whether the endogenous basis of the offence warrants these consequences.

Effects of the law

The effects of the law stem, to a certain extent, from the previous criterion and all the others before it. This criterion relates to the legitimacy of the standard. The difficulties and criticism arising from pro-active police action, changes in social normativity or in the knowledge base, make the law counter-productive, which, in turn, raises questions *sui generis* as to its basic tenets and legitimacy.

¹⁴ Pires, A.P., (2002) *op. cit.*, page 59.

We have compiled Professor Pires' suggested criteria under three headings. Each criterion includes an "action-related" and a "law-related" element, which can be used in distinguishing between various criminal offences.

Nature of the offence. The action here refers to the relationship between the "victim" and the "perpetrator", i.e. are they in a conflict or exchange-type situation? The law-related criterion focuses on establishing whether criminal law is able to distinguish between the victim and the perpetrator.

Justification. The action in this case is to determine whether perpetrators are able to recognize the harm caused to others by their actions. The legal aspect of the equation deals with determining the basis of the legitimacy of the standard.

Operativity. The action relates to identifying whether the application of the appropriate standard is triggered by the victim or witness or whether pro-active action is required by law-enforcement agencies. The legal side of the equation is to establish whether the enforcement of the standard could potentially sabotage itself.

It is our view that the analysis of *Criminal Code* offences based on these three criteria addresses the fundamental issue of whether limiting the liberty of an individual to act is justified in the criminal law. It is for this reason that we are less concerned about the criteria themselves than about the result of the application of these criteria to the criminal law standard.

Application to illegal drugs issues

Are illegal-drug-related offences two-sided prohibited behaviours under criminal law? Undoubtedly so.

The offence created implies an exchange-type situation and it is relatively unimportant whether the subject of the transaction is a prohibited substance or not. It is deemed to be a consented exchange between two parties. In the case of cannabis use – or the personal use of the opium or cocaine that just happens to be growing in my garden, - no exchange with another party takes place. Nevertheless, possession is prohibited in Canada, as is use in certain other countries.

Criminal law is hard pressed to find a victim. With respect to impaired driving endangering the lives of others, the *Criminal Code* contains a provision for the punishment of an individual operating a vehicle under the influence of any substance. The argument that cannabis poses enforcement difficulties is not valid. The same difficulties apply to driving under the influence of prescription drugs. What about the issue of children? It is difficult to see how cannabis use harms children, except where an "uncontrolled" market, brought about either by a lack of regulations or by the current illegality of cannabis fostering illegal markets, does cause harm to children.

In relation to referentiality, a user or even a seller does not see himself or herself as causing harm to others. At least, this is the case for cannabis derivatives. Of course, a situation where "grass" is mixed with other substances and adulterated substances are sold to users is reminiscent of the era of prohibition and is one of the reasons why

prohibition was scrapped. To justify behavioural standards and the offence, criminal law has to refer to external sources over which – and the interpretation of which – it exerts no control.

The operativity of the standard raises both application problems and on-going questions as to the legitimacy of the standard itself.

On the whole, the legal basis of the criminal law is weak where the prescribed standard (1) does not concern a relationship with others and where the characteristics of the relationship do not create a victim and a perpetrator able to recognize his/her actions; (2) has to find its justification outside fundamental social relationships; and (3) results in a form of enforcement, the harmful effects of which, undermine and challenge the very legitimacy of the law. (Where criminal law is involved in these issues, the very standard prescribed by the law makes the perpetrator the victim and tries to protect him from himself, which it can do only by producing a never-ending stream of knowledge, which remains constantly out of his reach.)

This analysis indicates to us that **only offences involving significant direct danger to others should be matters of criminal law.**

SCIENCE OR APPROXIMATE KNOWLEDGE

The public is generally willing to leave the choice of control methods to the interaction between health care experts and government agencies because they recognize that the drug is being used essentially for their well-being and they rely on expert knowledge to decide the best way to protect that.

(...)

Therefore, in formulating social policy on non-medical use, you must consider not only at the harm done by the law or at the harm done by the drug, but as far as possible a full cost/benefit analysis of drug use and the control measures, and any change in control measures that you may contemplate. This is a matter for all of society to decide - not for experts to decide as a matter of scientific knowledge.¹⁵

From the very outset of the Committee's proceedings, we have been aware that knowledge – even science-based, is not of itself a sufficient basis for the development of public policy on illegal drugs, in particular cannabis. One might be tempted to think that a Special Committee on Illegal Drugs – in this case, cannabis – should base its conclusions and recommendations solely on knowledge. However, no amount of knowledge alone could determine public policy. There are several reasons for this.

Firstly, the process of knowledge development is ongoing. This process is by definition a continuing study of the unknown. The pursuit of knowledge, in view of the scale and complexity of the task, is always approximate – or, as the French

¹⁵ Evidence by Dr. Harold Kalant, professor at the University of Toronto, before the Senate Special Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, issue no 4, pages 69 and 78.

anthropologist Claude Lévi-Strauss would have put it, cobbled-together. To search for knowledge is to acknowledge our ignorance of fundamental questions, which by definition remain open-ended. According to Professor de Koninck:

[Translation] *It is appropriate for us to celebrate the ignorance we have at last discovered because it is now part of our known ignorance (ordinary ignorance, in the classical vocabulary), as opposed to unknown ignorance (twofold ignorance) - thanks to neuroscience, oceanography, astrophysics, but also to depth psychology, the history of religion (to cite only two of the advanced "humanities") and to other disciplines which have particularly progressed in our era. We must celebrate it with the wonder and puzzlement which are still the necessary prerequisite of all discovery.*¹⁶

This situation might seem ironic, since never at any other time has such a wealth of information been produced – in all areas of human culture but also specifically on the issue of drugs – than in the modern era. So much knowledge has been gained in fact, that experts, such as economists, sociologists, criminologists, psychologists, and geneticists have become necessary players in the whole public policy justification process. It is only thanks to the ability of a team of scientists to successfully influence decision-makers that the greenhouse effect and the global warming phenomena have been acknowledged as real and that action has been taken to protect our environment. Governments' macro-economic decisions will be explained to the public on the nightly news by a senior economist. Where urban violence occurs or a serial killer is on the rampage, psychologists and criminologists are brought in to explain what is taking place, or to justify the thrust of criminal policy. The mass production of information and reference to experts in policy development give the public decision-making process at least credibility, if not legitimacy. Consequently, people who feel disenfranchised or even disillusioned by what they perceive as the disparity between the real world and the world presented to them in the media, will feel less inclined to challenge political decisions which are based on the “authority of knowledge”. Information is becoming knowledge, the learned are becoming experts and politicians, (who are increasingly allergic to independent reflection on principles and fundamental issues), have come to rely on this handy army of “experts”, who are ever ready to proffer advice.

However, information is not knowledge. Indeed, knowledge cannot be reduced to mere information. The Internet teems with information, but no one would dare contend that all of it could be deemed knowledge.

Secondly, the knowledge production process is fragmented and, like modern life itself, has difficulty addressing the issue of meaning. No better knowledge is produced with the addition of academic disciplines all studying issues through the lens of their own field of expertise than is produced when one of these disciplines works in isolation. The promotion of inter-disciplinary and trans-disciplinary approaches will remain as meaningless as calls for a social “partnership”, until there is genuine resolve to grasp the issues of meaning and comprehension. Prestigious institutes such as NIDA

¹⁶ De Koninck, T., (2002) *op. cit.*, page 25.

may have huge research budgets and conduct research, which in itself, is both fascinating and useful, but they function as if their sole goal were to demonstrate the bio-psychological mechanisms of “drug addiction” and the dangerous abuse that results from the consumption of “drugs of abuse”, as they call them.

However, the reasons for particular practices cannot be reduced to the sum of their constituent parts, or a jumble of re-enactments. Remarkable knowledge about cell mechanisms and genetics does not provide answers to the ethical and political issues raised by cloning. In the same way, knowledge about the mechanisms of the atom and nuclear fission did not provide answers to the issue of the manufacture and use of nuclear weapons. The highly abstract and math-based discipline of economic “science” is so far removed from reality that it is no longer able to explain the gulf that exists between nations or between extravagant wealth and human misery.

Researchers seem more concerned with mathematical equations and abstractions, and as a result, fail to ask fundamental questions. Their fields of knowledge are patchy and highly compartmentalized and there often remains a confusion between knowledge, information and technology. To ask fundamental questions, is to link issues and to re-acknowledge the complex nature of these issues in an attempt to identify the underlying reasons. There are on-going debates between scientists and philosophers over linking issues and over the shift towards an integrated knowledge base of human beings.¹⁷

Thirdly, this raises the whole issue of the so-called “learned idiot” “experts”.

[Translation] Idiots is the right word (from the Latin *idiota*, meaning “ignorant person”, borrowed from the Greek *idiôtês*, of the same meaning, as opposed to *pepaideumenos*, “cultivated man”). What is unfortunate is that their unearned reputation as experts extends all the more the influence of this “idiocy” in societies such as ours where “science” exercises a magic power and “that power appears increasingly legitimized by ‘learned’ experts,” as Jacques Testart notes. “Indeed, the expert provides reassurances and citizens are reluctant to decry the absurdity or cynicism of a political decision approved by ‘the most qualified experts’.”¹⁸

We are not trying to take issue with science but rather to challenge the difficulty scientists have in reflecting on their research. It is one thing to conduct cutting-edge research on specific issues, but it is quite another to claim to use the resultant fragmented knowledge to provide “explanations”. It is yet another to attempt to provide answers that science is quite simply not able to provide. It is one thing to conduct studies of the behaviour of laboratory rats, which have been administered a dose of Delta 9-THC (the principal active component in cannabis), but it is quite

¹⁷ Based on a very eloquent exchange between a philosopher and a neurobiologist: Changeux, J.P. et P. Ricoeur (1998) *What makes us Think* (translation of: *Ce qui nous fait penser. La nature et la règle*. Paris: Odile Jacob), pages 77-78

¹⁸ De Koninck, T. (2002) *op. cit.*, page 6.

another to claim that this type of experiment is useful in understanding cannabis use and its effects on human beings. It is still another issue to contend that this research can provide an answer to cannabis public policy-related issues.

Drug use is a social action and forms part of a particular individual's behavioural pattern and as such, cannot be reduced to mere neuro-psychological mechanisms. It might be useful to understand the mechanisms involved but this knowledge alone will not explain the reasons underlying drug use in our society.

Fourthly, the colonization of the mind by the authority of experts-acting as mediators between politicians and the community – equates to the dangerous colonization of social sciences by natural sciences. This is nothing new. This process began in the 19th century but significantly accelerated during the 20th century. The most significant manifestation of this process is the ever-closer links between psychology and neuro-science. Consequently, a transposition of methods and problem-approach systems has taken place. As a result, human sciences have now taken on a quantitivist-reductionist approach, which in turn has led to a knowledge crisis. A sample of 100 young people chosen at random to undergo a battery of psychological tests aimed at determining why they use cannabis will provide apparently serious anecdotal research and a series of correlations, which are unlikely to reveal the reasons behind drug use.

In some academic and decision-making circles, it is fashionable to refer to “*evidence-based*” policies. By this, we mean policies based on “scientific” evidence of approaches that work. One of the most striking examples of this approach was the Crime Reduction Strategy implemented in the United Kingdom in 1998 by the then newly-elected Labour government. Under this scheme, considerable money was earmarked to support those crime prevention initiatives that studies had shown to be effective with the goal of reducing various types of crime by a specified percentage over a five-year period.¹⁹ Despite this scheme, the United Kingdom is currently facing a crime “crisis”, in part because crime rates have risen, and the Crime Reduction Strategy is a shambles.

It is tempting to ask how the outcome could have been any different. Social engineering strategies in areas such as population control and crime prevention date back to the 19th century and have rarely provided tangible results. These initiatives, which are built on one or two “formulae”, themselves drawn from a small number of controlled experiments, do not take account of the complex nature of the modern world, with its ever-growing, increasingly fluid and intangible interdependent and multi-level relationships. Is it in an attempt to flee this reality that we seek refuge in the mathematical abstraction of correlations between supposedly predictive variables?

The Committee's report - especially the second part - has put great emphasis on research-based knowledge. This focus is an attempt to do justice to the knowledge that

¹⁹ Chapter 20 discusses this issue in greater detail since the strategy includes a drug-related initiative.

has been developed over the past few decades. We considered it important and indeed necessary to give it detailed consideration. Indeed, the Committee recommends that the drive for knowledge acquisition on specific issues that we deem to be important be continued.

We do not claim, however, to have answered the fundamental question of why people consume psychoactive substances, such as alcohol, drugs or medication. We were indeed surprised, given the quantity of studies conducted each year on drugs, that this area has not been covered. It is almost as if the quest for answers to technical questions has caused science to lose sight of the basic issue!

Scientific knowledge cannot replace either reflection or the political decision-making process. It supports the process. Indeed, we consider that its greatest contribution to public drug policy is in doing so. Our guiding principle is that **science, which must continue to explore specific areas of key issues and reflect on overarching questions, supports the public policy-development process.** No more, but no less.

CONCLUSIONS

One of the greatest challenges for modern societies is to collectively invent new forms of social life and community belonging that stretch beyond the tools of formal law. As individuals with objective and subjective rights, people can participate fully in the development – we would even go as far as to say the conquest – of the collective project of creating a society. It is no longer sufficient just to develop legislation and for people to automatically accept this legislation just because it was democratically decided by Parliament. We need to promote ethical participation - through discussion - in the development of collective and individual governance. The groups from civil society, whether they oppose the “behind-closed-doors” globalization process or support promoting fair and sustainable development, are asking how we can collectively develop a joint-participation normativity process, in which collective governance and individual governance are mutually supportive.

This discussion brings us to the conclusion that **public policy on illegal drugs, specifically cannabis, ought to be based on an ethic of reciprocal autonomy and a resolve to foster human action. It ought to defer to criminal law only where the behaviour involved poses a significant direct danger to others. It ought to promote the development of knowledge conducive to guiding and fostering reflection and action.**

CHAPTER 4

A CHANGING CONTEXT

Our work is being conducted at a time in history, in a given historical period. That history is not simply a field external to us, something outside us, exercising no influence on what we do. It is closely bound up with our actions, influencing them in various subtle ways. At the same time, because we are living through and making that history, we do not have the necessary distance from it to reconstitute all its elements or to understand all its implications. However, to re-situate our work in its complexity and uncertainty, we have a responsibility to attempt to ascertain certain elements of this history-in-the-making. This brief chapter is an attempt to identify certain historical elements we think are relevant to our effort. We have identified six elements which we have divided into two spheres, international and national, recognizing that those two spheres necessarily interact with each other. The international elements are: the globalization of markets and the trend toward economic and even political integration; the spiralling increase in discourse on safety and the drug-crime equation; and the aspects of change becoming apparent in certain countries with regard to drug policies. The national elements are judicial activism, which is reflected in significant court decisions at least with regard to the therapeutic use of cannabis; the adoption of the National Strategy on Community Safety and Crime Prevention; and the fight against organized crime.

CHANGES IN THE INTERNATIONAL SPHERE

The last two decades have witnessed significant changes in the international arena and in the structure of national states. The idea here is not to write the history of or to analyze this period. A few of those changes, however, have had a definite impact on drugs.

Globalization and integration

Since the early 1980s, with market deregulation, we have witnessed a globalization of trade and a more significant degree of continental integration. The end of the Cold

War and the disappearance of the Soviet Bloc, as well as the opening of China to capitalist markets, have merely increased the pace of these movements. As a result, we have seen, in particular, an increasing degree of integration of the European economy under the Maastricht accords and in the North American Free Trade Agreement between Canada, the United States and Mexico.

At the same time, rapid technological change, particularly through the Internet and satellite communications, has helped to further open borders, although in varying ways and to various degrees, depending on the level of development in the various countries, to the movement of goods and capital. Similarly, the increase in population flows and travel has led, at times by default or even against the will of certain states, to freer movement of people.

These changes have had a significant impact on the illegal drug markets. The opening of markets and borders has of course created new money laundering opportunities, while making it more difficult to monitor borders and transportation. However, we all too often forget certain effects of macro-economic policies governing global capital flows and expected structural adjustments, particularly in developing countries. One study produced for the United Nations International Drug Control Program clearly shows this.

Efforts to achieve (balance of payments) stability often aim to reduce the external deficit by reducing the level of domestic consumption. Macroeconomic stabilization often requires a reduction in expenditure by government and/or the private sector.

In situations of reduced money growth, an infusion of hard currency can bolster a country's foreign reserves, ease the hardship associated with expenditure-related policies, and moderate foreign indebtedness. Drug money could in this light be perceived as a potentially stabilizing force, a source of capital without the strings of conditionality attached. Clearly, there are "benefits" which accrue to countries which serve as reservoirs of the revenues from the international drug trade.¹

In addition, the trend toward the privatization of entire sectors of national economies, particularly in Eastern European countries after the fall of the Berlin Wall, but also in a number of Latin American and Asian countries, in an environment in which internal regulation measures are weak and bank credit tight, fosters the inflow of money from organized crime particularly through the laundering of drug money. It has been observed moreover that the concentration of industrial production in those countries is not necessarily reduced following privatization, thus further favouring penetration by organized crime.²

Observers also too often forget the role of investors from the developed countries, where the push for deregulation and market liberalization originates. In those countries, as Campodónico has noted, "(r)are indeed are prosecutions against drug traffickers or

¹ Keh, D.I. (1996) *Drug Money in a Changing World. Economic Reform and Criminal Finance*. Vienna: UNDCP, technical paper no. 4.

² *Ibid.*, pages 11-13.

financial institutions of the industrialized world, which is precisely where most of the proceeds of drug trafficking are kept."³ The result is a kind of dual discourse in which the necessity of liberalization of capital for multinationals makes it impossible to distinguish between clean and dirty money. The example of Peru developed by Campodónico and that of Russia examined by Keh show striking structural similarities.

The end of the Cold War also meant that the countries allied to the Soviet Bloc, or internal guerrilla groups, had to turn to other sources of financing. This is the analysis of the Geopolitical Drug Watch and its founder Alain Labrousse, who appeared before the Committee on May 28, 2001, citing the example of Kosovo:

*What happened in Kosovo is a good example in this regard. The creation of the KLA was financed by intense heroin traffic from Istanbul. The heroin was sold in Switzerland to buy Kalashnikovs and handguns. They were more or less freely available and were stored in the Albanian part of Macedonia.*⁴

And as though to make the connection with the perverse effects of liberalization and the involvement of macroeconomics, Mr. Labrousse wrote in an earlier book:

*[Translation] According to estimates, drug trafficking in the world generates between 420 and 577 billion francs in business annually. The growing role that these funds play in the democratization and economic restructuring process is leading to an explosion in drug production and trafficking in Asia, Africa and the East. It is this windfall, drawn on by local powers of all kinds, that fuels nationalist, ethnic and religious conflicts in the Third World and countries of the former Communist Bloc. Drugs, an economic issue and a tool of power, are now a given in international relations. Apart from a few major traffickers, the banking systems of the rich countries, the IMF and the major international organizations are involved.*⁵

Like other analysts, Mr. Labrousse observes that the developed countries are not immune to criticism since they "close their eyes" when their interests, particularly strategic and economic, are at stake.

*[Translation] An incident occurred and was reported by the press when the international financial action group prepared a list of countries suspected of engaging in money laundering; it did not include either the Anglo-Norman island of Jersey or the Principality of Monaco, which surprised everyone. It was subsequently discovered that France and England had negotiated with each other to ensure neither appeared on the relatively infamous list.*⁶

³ Campodónico, H. (1996) "Drug trafficking, laundering and neo-liberal economics: Perverse effects for a developing country." in Dorn, N. et al. (eds) *European Drug Policies and Enforcement*. London: Macmillan Press, page 231.

⁴ Senate of Canada (2001) *Proceedings of the Special Committee on Illegal Drugs*, Ottawa: Senate of Canada, Issue No.3, page 27. The reports of the OGD may also be consulted at: www.ogd.fr.

⁵ Labrousse A. and A. Wallon (1993) *La Planète des drogues: organisations criminelles, guerres et blanchiment*. Paris: Seuil.

⁶ Labrousse, *op. cit.*, pages 28-29.

This is also the case of European interests in Morocco and Africa more generally, as well as American interests elsewhere, in tax havens.

Chapter 1 of the 2001 report of the International Narcotics Control Board (INCB), a UN agency responsible for monitoring implementation of international drug control treaties, concerns the effects of globalization and new technologies. The agency writes that, apart from their "innumerable benefits" globalization and new technologies have had perverse effects: undermined cultural identities, political and social itemization, marginalization and growing poverty in certain sectors. According to the Board, *"these disparities are exploited by drug dealers and traffickers in their attempts to develop new markets. Moreover, in the course of the last decade, the growth in trade and financial activity has provided criminals with greater possibilities for concealing the illicit transfer of goods such as internationally controlled drugs and precursor chemicals and for disguising the proceedings therefrom."*⁷ According to the report, drug traffickers use new technologies to enhance the effectiveness of product delivery and distribution, to protect themselves and their illegal activities and to commit conventional offences using new methods or to commit new types of offences.⁸ Among other things, the Board also notes:

- The Inter-American Drug Abuse Control Commission noted for 1999-2000 that the Internet had become the most widely used medium for expanding the production of synthetic drugs in some countries of that region;
- According to the International Criminal Police Organization (Interpol), in 2000, over 1,000 Web sites world-wide offered to sell illicit drugs, mostly cannabis;
- Increasing recourse to electronic means of financial transfer, together with a massive growth in the volume and speed of monetary flows, lead to reduced capability for detecting illicit capital movements; and
- The Financial Action Task Force on Money Laundering (FATF) has warned that there are three characteristics of Internet use that could aggravate certain conventional money-laundering risks: ease of access, depersonalization of contact and rapidity of electronic transactions.⁹

In short, while the search for greater coherence, and indeed for better predictability of international markets, is highly promising, particularly as regards the developing countries, it also has untoward effects, regardless of all other geopolitical considerations. Moreover, these characteristics also afford "unexpected" benefits... for organized criminal groups.

⁷ *Report of the International Narcotics Control Board for 2001*. Vienna: author, page 1.

⁸ *Ibid.*, page 2.

⁹ *Ibid.*, pages 2-4.

Difficulties of the security debate

Over the same period, in various Western countries, a preoccupation for domestic security has gradually arisen in response to the perceived or actual increase in crime and to the public's feelings of insecurity. The effects of this have been observed in election campaigns based on law and order and in a shift toward measures considered repressive by some, such as zero-tolerance policies.¹⁰

With regard to drugs, this social discourse has had two main components. The first, starting in the early 1980s under Ronald Reagan's presidency, was the "war on drugs", which went far beyond U.S. borders. The second, starting in the late 1980s, an attitude increasingly emerged that equated drugs with crime.

The war on drugs made it possible to allocate unprecedented resources to the effort. It was at this time, it will be remembered, that Canada launched the first phase of its anti-drug strategy with a budget of \$210 million over five years. In its "war on drugs" the United States allocated 17 times that amount, increasing federal spending alone from \$100 million in the early 1970s to more than \$17 billion in 2002. The combined spending of the federal government and the states on the war against drugs was estimated at more than \$40 billion in 2002.¹¹ As a result, that war led to a quadrupling of the American prison population, from 500,000 inmates in the early 1980s to more than two million in the late 1990s.

*During the 1990s, corrections constituted one of the fastest growing line items in state budgets. On average, corrections consumed 7 percent of state budgets in 2000. Today, it is costing states, counties and the federal government nearly \$40 billion to imprison approximately two million state and local inmates, up from \$5 billion in combined prison and jail expenditures in 1978. Twenty-four billion of that was spent on the incarceration of non-violent offenders. Despite the modest recent decline in state prison populations, the massive growth in state prisoners over the past two decades has meant that **one out of every 14 general fund dollars spent in 2000 was spent on prisons.** (...) The expansion of America's prisons has been largely driven by the incarceration of non-violent offenders. The percentage of violent offenders held in state prisons declined from 57 percent in 1978 to 48 percent in 1999. From 1980 to 1997, the number of violent offenders committed to state prison nearly doubled (up 82 percent), the number of non-violent offenders tripled (up 207 percent) while the number of drug offenders increased 11-fold (up 1040 percent).¹²*

In Canada, as will be seen in Chapter 14, while the overall crime rate has been declining regularly in the past 10 years, the percentage of drug-related incidents has constantly increased, and the overall prison population has remained stable. There are

¹⁰ On this point, see, for example, the work of Wacquant, L. (2000) *Les prisons de la misère*. Paris.

¹¹ McNamara, J.D. (2000) "Commentary: Criminalization of Drug Use." *Psychiatric Times*, Vol. XVII, No. 9.

¹² Greene, J. and V. Schiraldi (2002) *Cutting Correctly: New Prison Policies for Times of Fiscal Crisis*. Washington, D.C.: The Justice Policy Institute. See also Schiraldi, V., Holman, B. and P. Beatty (2000) *Poor Prescription: The Costs of Imprisoning Drug Offenders in the United States*. Washington, D.C.: Justice Policy Institute. Available on line at: www.cjci.org.

even grounds to suggest that the percentage of inmates with addiction-related problems has in fact risen.

This discourse has resulted in a host of national and international measures, in particular increased policing powers in the war against drugs in various countries, a reinforced international police infrastructure, use of the war against drugs in international diplomacy and its reflection in UN proceedings, particularly at the United Nations' extraordinary session on drugs in 1998.

The other aspect of the debate is the drug-crime equation. For a significant proportion of citizens, drug use is associated with crime, when it is not simply reduced to one of its major causes. Witness the following comments:

*We cannot continue to apply policies and programs that do not deal with the root causes of substance abuse and attendant crime.*¹³

*In countries that have adopted permissive policies toward drug use, violent crime and organized criminal activity have increased proportionately to the drug trade.*¹⁴

*The social harm from other illicit drugs (such as cannabis - ed.) presents a different picture. In some communities or neighbourhoods across the country, the harm caused to innocent victims of violent crime and property crime is very great. (...) This results from drug-addicted users committing crimes to get money to feed their habit.*¹⁵

Deeply rooted in perceptions and attitudes, this belief, which is discussed later in Chapter 6, and which research data support only in part, has resulted in a series of measures including the creation of special drug treatment courts and the introduction of treatment orders for offenders with known dependence problems, the spread of urine testing programs in the work place and in prisons, as well as the remodelling of socio-community intake systems.

This association of drugs and crime sprang from fertile ground, for a number of reasons: changes caused by globalization and the realignment of the role of the state, which explain at least in part the increased social and economic inequalities between North and South, but also within countries, in the North and in the South; the increased insecurity of general living conditions following the 30 years, from 1945 to 1975, of unprecedented prosperity and employment security; divisions within communities caused by uncertainty and inability to manage mixed populations. For all these reasons the increase in "ordinary" crime (break and enter, car theft, vandalism and so on) has become the perfect metaphor for the insecurity of living conditions. Being

¹³ McCaffrey, B.R., Remarks before the First Annual Criminal Justice and Substance Abuse Conference, Albany, New York, June 29, 1999.

¹⁴ Testimony of Mr. Dale Orban, for the Canadian Police Association, before the Senate Special Committee on Illegal Drugs, in Senate of Canada, Issue No. 3, May 28, 2001, page 49.

¹⁵ Testimony of Mr. Michael J. Boyd, for the Canadian Association of Chiefs of Police, before the Senate Special Committee on Illegal Drugs, Senate of Canada, Issue No. 14, March 11, 2002, page 76.

an easy target that has considerable, very real impact on everyday life in neighbourhoods already subject to other social and economic problems, minor crime now elicited a stern, repressive response. Hence, in all Western countries, the number of prison terms and length of sentences increased starting in the mid-1980s. In addition to this collective security "crisis", there was a division between generations, as a result of which youths as a group came to be viewed as a source of concern, if not simply potential criminals. For example, during that period, Canada experienced an unprecedented increase in its reliance on detention for minors, placing it at the top of the list of industrialized countries in that regard.¹⁶ Since young people are the principal drug users, the rest of equation was quickly established.

From anti-drug policies to drug policies

However, the advent of AIDS in the 1980s helped to cast doubt on prohibitionist policies on illegal drugs. Toward the end of the decade, it was discovered that intravenous drug users had a high rate of HIV and other pathologies such as hepatitis. In fact, intravenous drug use was the second leading cause of infection among men, after homosexual and bisexual practices, and the second leading cause as well among heterosexual women.¹⁷ Repressive policies, based on prohibition of use, do not make it possible to adequately inform users or to adopt risk reduction and preventive measures, such as needle exchanges or supervised injection sites. The increase in harm reduction practices in a number of countries would be based on this new reality.

The creation of agencies monitoring illegal drug use trends was another factor in the questioning of drug policies. Until the mid-1980s, the U.S.A., England and Australia were virtually the only countries with systems for regular and repeated epidemiological surveying of drug use trends in the population. Starting in 1993, the European Union developed its tools to monitor trends in use and policy responses with the establishment of the European Monitoring Centre for Drugs and Drug Addiction and its focal points in individual EU countries. This regular monitoring system showed, among other things, that drug use trends may not vary so much with public policies as with social, cultural and symbolic factors.

Lastly, some states began to question their public policies on the basis of impact assessment studies. That was the case in particular of Australia and Switzerland as well as certain American states. Apart from the often emotional rhetoric, it was discovered in those studies that, in addition to having little impact on drug use, policies had significant untoward effects and high economic costs. It was moreover the results of certain cost benefit studies that led California and other U.S. states to review their

¹⁶ On this point, see, *inter alia*, the work of Bala, N. (2002) *Juvenile Justice Systems. An International Comparison of Problems and Solutions*. Toronto: Thompson Educational Publishing.

¹⁷ Riley, D., *op. cit.*, page 14.

highly repressive approaches (involving, for example, automatic incarceration on the third offence, whatever it might be).¹⁸

While national legislation on illegal drugs, particularly cannabis, did not in fact change, there was nevertheless a distinct trend toward questioning practices, particularly legal practices, and seeking alternatives while still complying with the international conventions. That was the case of Spain, Italy, certain Australian states, Belgium and, more recently, Portugal and Switzerland.

CHANGES IN CANADA

We have identified three major causes of change in Canada over the same period which have had at times paradoxical effects: the judicial activism resulting from the coming into force of the Canadian Charter of Rights and Freedoms in 1982, the adoption of the National Strategy on Community Safety and Crime Prevention and the fight against organized crime. Since we will be discussing each of these causes more fully in subsequent chapters of this report, we will only briefly sketch out the broader context here.

Judicial activism

With regard to cannabis, there is undoubtedly no better example than the decision by the Ontario Court of Appeal in the *R. v. Parker*.¹⁹ In that case, the Ontario Appeal Court considered the constitutional validity of the prohibition against marijuana under the *Controlled Drugs and Substances Act* in the context of its use for medicinal purposes. The Court unanimously held that Terrance Parker's allegations that the prohibition violated his fundamental rights under section 7 of the Canadian Charter of Rights and Freedoms were founded. Rosenberg J.A., writing for the majority, found that Mr. Parker needed marijuana to control the symptoms of his epilepsy and that the prohibition against marijuana possession was accordingly unconstitutional. The Court thus held that the statutory provision was null and void. However, they suspended the declaration of invalidity for one year, thus giving the government time to amend the act accordingly. In July 2001, as a result of that decision, the government made regulations circumscribing the use of cannabis for medicinal purposes.

Other judicial decisions altered the applicability of drug legislation in various ways, particularly regarding police powers. Certain of these decisions are briefly reviewed in Chapters 14 and 15.

¹⁸ See, for example, the study by Rydell, C.P. and S.S. Everingham (1994) *Controlling Cocaine: Supply vs. Demand Programs*. Rand: Santa Monica.

¹⁹ *R. v. Parker* 49 O.R. (3d) 481.

Generally speaking, it has been observed that, since the Charter came into force, the courts have played an increasingly significant role in Canadian political life, and the drug issue has not fallen outside the scope of this judicial activism. Moreover, a decision on the issue of the use of cannabis for non-medicinal purposes is to be rendered by the Supreme Court of Canada in the coming months.

A national crime prevention strategy

In 1999, as a result of the work of the National Crime Prevention Council, the federal government introduced the National Strategy on Community Safety and Crime Prevention. The purpose of this national strategy, originally allocated an annual budget of \$35 million, which increased to approximately \$65 million this year, is to prevent crime through social development actions in the communities by taking action in particular on risk factors among children and youths. While the Strategy does not specifically mention prevention of drug use, a certain number of its projects and activities have focused on that issue in various ways.

The Centre has seen fit to fund two special drug treatment court pilot projects, in Toronto and Vancouver, for the purpose of preventing repeat drug abuse and related criminality. The Centre also supports an initiative of the Federation of Canadian Municipalities to introduce drug-free communities in a certain number of cities. It is also supporting the evaluation of alternative measures programs for youths accused of cannabis possession.

The fight against organized crime

If there is one legal subject that has given rise to extensive public debate, led to the passage of new legislation granting greater powers to police forces and resulted in spectacular police operations and no less spectacular trials, it is organized crime, in particular criminalized motorcycle gangs in Quebec, the Italian-Canadian Mafia in Montreal and the Asian heroin rings on the West Coast.

In 1995, Parliament passed Bill C-95 granting police officers more effective tools for investigating and prosecuting individuals taking part in gang activities. Four years later, three problems led the government to propose amendments to the *Criminal Code* and other statutes: the problems involved in implementing the act, the growing influence of organized crime in Canada and the illegal activities committed by police officers in undercover operations. In 1999, in passing Bill C-51 (an omnibus bill amending the *Criminal Code*), Parliament granted immunity from prosecution to police officers who had to commit offences related to money laundering in the course of an investigation or in performing other duties. According to the government, the purpose of that amendment was to support police officers in the fight against organized crime and money laundering.

In addition, on October 19, 2000, the Sub-Committee on Organized Crime of the House of Commons Standing Committee on Justice and Human Rights tabled a report proposing a series of amendments that could be made to the *Criminal Code* to facilitate the fight against criminal organizations. The Sub-Committee began its work in April 2000, and, in view of the nature of the subject under study, its members decided at the outset to perform their work in camera. Among other things, the Committee recommended that the *Criminal Code* be amended in such a way as to group together all provisions concerning activities relating to organized crime in a specific part entitled "Organized crime, designated substance offences, gangs and money laundering". A number of the Committee's recommendations were incorporated into Bill C-24, which received Royal Assent in December 2001.

A SOCIETAL DEBATE

These considerations of the global environment help put the drug issue in context. Always considered as a public security question, this issue more fundamentally concerns the upheavals societies are currently experiencing as a result of globalization. The place of drugs in those societies, which are shifting painfully from the modern to the post-modern world, attempting to reinvent society after individual destiny, so central to the cultural "revolutions" of the 1960s, has replaced family and collective destiny, raises questions about the boundaries of the individual and his relationship to others and about the very possibility of community given the significance of the individual. As the sociologist A. Ehrenberg has emphasized:

[Translation] (...) *drugs appear as the condenser of uncertain responsibility. For democratic societies, it is the opportunity for a consideration of the limits of private freedom, that is to say of the tension between minimum contact with one's self, without which one cannot enter into relations with others, and minimum distance from self, without which one cannot make a society.*²⁰

In another way, this is also what B. Alexander said in a brief he submitted to the Senate Committee:

*Because western society is now based on free-market principles which mass-produce dislocation, and because dislocation is the precursor to addiction, addiction to drug use and to other substitute life styles within western society is not the pathological state of a few, but, to a greater or lesser degree, the general condition. Because free-market society increasingly provides the model for globalization, addiction is becoming more and more prevalent everywhere on earth (...).*²¹

²⁰ Ehrenberg, A. (1995) *L'individu incertain*. Paris: Calman Lévy, page 163.

²¹ Alexander, B.K. (2000) "The globalization of addiction." *Addiction Research*, Vol. 8, No. 6, page 504.

As may be seen, the drug issue cannot simply be raised in terms of criminalization or decriminalization because it refers to much deeper societal issues relating to the role of government of the self in a context in which political government of the community is changing, and to the relationship between the two. Reducing the drug issue to a question of more or less repressive or more or less liberal criminal legislation is to rule out broader questions and to play the game of the particular interests of institutions which have every interest in reducing the figure of the addict to that of the “other”, the deviant, the pathological case, and drugs to mere illegal drugs, whereas the faces of drugs are many and diverse. As the International Narcotics Control Board states in its 2000 report, trafficking in licit psychoactive drugs and their increased use are, in many respects, much more disturbing phenomena than the illegal drug market. There is a great risk that we will mistake the tip of the iceberg for the iceberg as a whole and allow ourselves to drift away on notions as simplifying as they are dangerous for a true public policy on drugs.

PART II

CANNABIS: EFFECTS, TYPES OF USE, ATTITUDES

CHAPTER 5

CANNABIS: FROM PLANT TO JOINT

Cannabis, marijuana, pot, grass, kif, grifa, ganja—from so many cultures, so many names for the drug made from *cannabis sativa indica*, one of the two main varieties of hemp. Beyond these various names are also different ways in which the drug is used and the context of those various usages: here marijuana is rolled with cigarette tobacco in a cigarette paper (joint), there kif is smoked in a pipe and elsewhere ganja is smoked in a water pipe. Sometimes it is baked into cookies or cakes. The French *pétard*, the English joint or the Indian *bangh* are all names for the product consumed and, at the same time designate different usages: marijuana is most often composed of the plant's flowering tops and dried, powdered leaves; *sinsemilla* is a preparation consisting of female tops of a private variety of seeds, whereas Indian ganja consists solely of fertilized flowering tops.¹

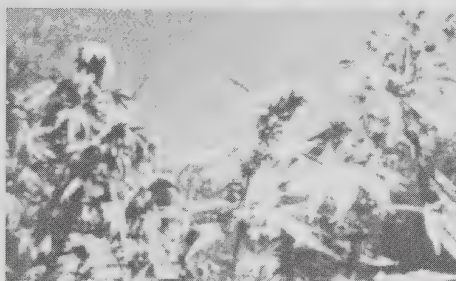
These names are not mere accidents of folklore: like other substances, cannabis has codified uses that vary across cultures. The words used to name the same drug refer to a set of relations that populations of various cultures maintain with it, a kind of code of manners, but also of reasons to use the drug. In North America (United States and Canada), marijuana has long been identified with youth and the sexual liberation of the 1960s; in India and Jamaica, *ganja* has religious aspects which it does not necessarily possess in the West; and this same drug has still other cultural meanings in the Maghreb. We return to this question in Chapter 6.

This chapter first describes the cannabis plant and the various forms in which it becomes a consumer drug. We then take a brief look at the geographical origin of the cannabis plant and the routes along which it circulates in the modern world, noting at the same time its current modes of production (soil-based and hydroponic) which have developed in certain regions of Canada. We then describe the pharmacokinetics of the cannabis plant, in particular its main active ingredients and their metabolism in the body.

¹ See in particular INSERM (2001) *Cannabis. Quels effets sur le comportement et la santé ?* Paris: Les Éditions Inserm, page 143 passim; Ben Amar (in preparation); Wheelock, B.B. (2002) *Physiological and Psychological Effects of Cannabis: Review of the Findings*. Report prepared for the Senate Special Committee on Illegal Drugs, Ottawa: Senate of Canada.

ONE PLANT, VARIOUS DRUGS²

There are a number of varieties of cannabis. The best known are *Cannabis sativa*, *Cannabis indica* and *Cannabis ruderalis*. *Cannabis sativa* is the main variety which grows in virtually any climate. In dry, sandy and slightly alkaline soils, it yields plants that can reach up to seven meters in height. In Canada, the preferred variety for soil-based cultivation is *Cannabis indica*, which is a shorter plant, but with higher concentrations of Δ^9 -THC (the main active ingredient of cannabis, discussed more fully below). There are male and female plants. In general, female plants are richer in Δ^9 -THC than the males, which are often smaller and bare of leaves. Δ^9 -THC is mainly found in the resin secreted by the flowering tops.



Flowering tops and leaves of cannabis

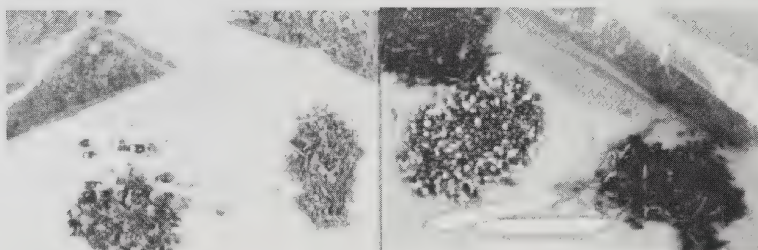
It appears that cannabis was first known in China some 6,000 years ago, then subsequently in India, then the Middle East, Africa, Mexico and South America. Cannabis can be cultivated in a number of ways, in greenhouses or hydroponically, which makes it possible to increase plant productivity and achieve high Δ^9 -THC levels. Methods for genetically selecting the best greenhouse varieties and crops have also made it possible to increase the active ingredient content.

² This section draws freely on various papers, in particular those by Ben Amar (in preparation), of INSERM, *op. cit.*, and Pelc, I., (2002) (ed.) *International Scientific Conference on Cannabis*, Brussels. In particular, we wish to thank Professor Ben Amar for his permission to reproduce the plates.



Male and female cannabis plants

Marijuana, which is a Mexican term initially used in reference to cheap tobacco, but which subsequently designated certain parts of the cannabis plant, is generally green or brown in colour and produces a characteristic odour when burned. It resembles oregano or coarse tea.³ Marijuana comes from all the parts of the plant once dried. In this form, its THC content is lower; THC content is increased by selecting the flowering tops of the female plant. Dried and coarsely powdered, marijuana is most often rolled into thin cigarettes together with cigarette tobacco (joint), and sometimes smoked in a pipe or, less frequently, in cigar form. A typical joint contains between 0.5 and 1 g of cannabis. Like hash, it can also be baked into cookies and cakes, and be drunk as an herbal tea as well. A number of specialists told us that domestic cannabis made through controlled greenhouse production costs approximately \$100 an ounce, and is then sold on the street at average prices ranging between \$200 and \$250. While we consider this estimated production cost high, the only other available studies concern production costs in developing countries such as Morocco.



Marijuana and joints

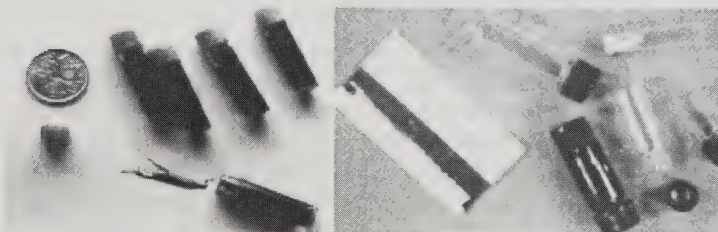
³ On these questions, see in particular: McKim W.A. (2000) "Cannabis" in McKim, W.A. (ed.) *Drugs and Behaviour. An Introduction to Behavioral Pharmacology*. Upper Saddle River: Prentice Hall; Health Canada (1990) *Straight Facts About Drugs and Drug Abuse*. Ottawa: Department of Supply and Services; and Comité permanent de lutte à la toxicomanie (2001) *Drogues. Savoir plus. Risquer Moins*. (Édition québécoise) Montréal: Stanké.

Hashish, also known as hash, shit, kif (in North Africa) and *charas* (in India), is the viscous resin produced by the marijuana plant and obtained by pounding then compressing the dried leaves and flowering tops to obtain what, in France, is called a "barrette" or here a cube or block. It takes approximately 45 to 75 kg of cannabis to produce 1kg of hash, which is sold in light brown to black pieces of hard or soft consistency. It is frequently smoked, alone or mixed with tobacco or marijuana, in a cigarette (joint), pipe or, more rarely, cigar. It may also be baked into cookies or cakes. The Δ^9 -THC content of hash is generally between 3% and 6% in normal production. As is the case for cannabis, Δ^9 -THC content can be increased through growing methods and resin concentrations to achieve levels of more than 10% on average. Slightly more expensive than marijuana, hashish sells for approximately \$300 to \$350 an ounce on the street.



Haschich

There are two other cannabis-based products, marijuana and hashish oils, which are extracted from resin using 90-proof alcohol, which is subsequently evaporated through exposure to the sun. These oils are viscous, greenish brown to blackish, foul-smelling liquids, with generally higher cannabinoid concentrations of up to 30% to 60% Δ^9 -THC. Oils are generally dripped onto cigarette paper or tobacco then smoked. They are scarce and more expensive than other products.



Cannabis oils

The following passage from a report prepared by Labrousse and Romero for the *Observatoire français des drogues et des toxicomanies* (OFDT; French Monitoring Centre for Drugs and Drug Addictions) in 2001 on cannabis production in Morocco describes the various stages of production very clearly.

From Cannabis to Oil – The Production Process in Morocco

Kif is the name given to the cannabis plant as a whole. (...) Cut and dried in the sun (generally on rooftops) for at least a month and a half, it is preserved in houses for several months under plastic tarpaulins. Chopped by hand with a special knife on a board, it is then mixed with tobacco for smoking. The traditional mixture consists of one-third kif, two-thirds tobacco and is smoked in a *sebsi*, a long wooden pipe with a terracotta or stone pipe bowl.

Chira is the powder resulting from solidification of the small resin drops exuded by the flowering tops of the female plants. To separate the resin from the dried plants, processors pound or shake the plants over a stretched thin nylon veil that serves as a screen. The first powder to fall, golden beige in colour, is called *sigirma*. This is the top quality, so-called double-zero powder which is said to contain as much as 20% THC. The next powder to fall is called *hamda*, which is mixed with plant waste giving it a greenish colour. *Hamda* is lightly screened to yield various product qualities: zero, no. 1, no. 2, no. 3 and no. 4 (the lowest quality), containing respectively from 10% to 2% THC. (...) It takes approximately 100 kg of kif to obtain 1 kg of top-quality hashish.

Peasants (...) told us that the rest of the operation, when carried out by traffickers, took place in ostensibly secret buildings isolated in the mountains. (...) There the powder is placed in cellophane bags, then heated and compressed to yield resin or hashish, readied for the market in the form of small bars (generally 250 grams) called *thisla* or "little plate". (...) The "double zero" quality, which derives its name from the two holes made in the bar with the end of a lit cigarette, is reserved for domestic consumption and preferred customers. Misinformed foreign customers often receive hash that has been cut with black polish, glue, henna, fig, earth or even medication.

(...) Cannabis oil is derived from no. 3 and no. 4 quality resins and produced by diluting hashish in a container with pharmaceutical alcohol. After six to eight hours of distillation, the liquid is filtered and stirred until all the alcohol has evaporated. Local production of this high value-added liquid (it takes 10 kg of hashish to produce one liter of oil) is less marginal than is generally thought.

Labrousse, A. and L. Romero (2001) *Rapport sur la situation du cannabis dans le RIF marocain*. Paris: OFDT.

CANNABIS ROADS

Where does the cannabis and hashish available in Canada come from? What quantities are imported and how much is produced locally? What routes are used to transport the drugs between provinces? What quantities are exported to other countries? What is the monetary value of this market? These are constantly recurring questions. They serve various purposes: to underline the scope of the drug "problem" generally, to explain the power of organized crime which makes money from drugs, as well as to substantiate the discrepancy between the size of the problem and the limited resources governments allocated to reducing supply. But this information can also assist in better understanding the extent of the problem experienced by peasants in the

various producer countries, the ecological issues raised by the cultivation of drugs, as well as the strategic position of drugs in geopolitics.

The cultivation of cannabis is the most widespread of all illegal drugs, which is not surprising since, not only does the plant grow readily in a number of climates, but it also requires little processing before becoming marijuana. According to the 2000 report of the *United Nations Drug Control Program* (UNDCP):

Over the last decade, 120 countries reported illicit cultivation of cannabis in their territory. Interpol identifies 67 source countries for cannabis through seizures made in 1998. (...) Estimating the extent of illicit cannabis cultivation, production and trafficking is much more difficult than for other plant-based drugs because of the significant amount of wild cannabis growth, the diverse nature of cultivation and the sheer magnitude of trafficking. In contrast to other plant-based narcotic drugs, illicit cannabis products can originate from three qualitatively distinct sources of supply: outdoor illicit cultivation; naturalized cannabis plant populations (wild growing cannabis); and plants cultivated indoors by means of sophisticated growing technology. (...) The large number of countries reporting an increase in cannabis consumption (two-thirds of all countries reporting drug abuse trends in 1996) would suggest that overall production must have increased; but this is only partly confirmed by seizure data. (...) Cultivation estimated (including wild growth), based on reports from Member States in the 1990s, ranges from 670,000 hectares to 1,850,000 hectares. Production estimates vary by a factor of 30, from 10,000 tonnes to 300,000 tonnes. Linking production and consumption estimates, UNDCP estimates world wide cannabis production to be at about 30,000 tonnes.⁴

As may be seen, estimates vary greatly and are enormously difficult to validate. How can anyone estimate the number of cannabis plants that are transformed into marijuana? The data provided by the governments of various countries on cultivated areas are themselves only approximations. As to the number of greenhouses and other forms of production, there is quite literally no way of knowing.

The work of the team at France's *Observatoire géopolitique des drogues*, under the direction of Alain Labrousse, is exemplary in the field. The box from the same report produced for the OFDT in 2001, describes a three-month field project in which the authors cross-checked data from various sources.

Variable Estimates – The Case of Morocco

In their study, Labrousse and Romero state that, according to the Department of Agriculture, cannabis was produced on 75,000 hectares in 2000. (By comparison, in its 2000 report, the ODCCP cites the figure of 50,000 hectares in cannabis production in Morocco, an official figure provided by the Department of the Interior.)

Based on their own work in the field, they estimate that 90,000 hectares were in production in 1999 and between 110,000 and 120,000 in 2001. That production involved approximately 200,000 families, between one and one and a half million persons. Based on those areas, production would be between 1,600 and 3,000 tonnes, after deducting the quantities of kif set aside for national consumption.

Labrousse and Romero, *op. cit.*

⁴ United Nations Office for Drug Control and Crime Prevention (2001) *World Drug Report 2001*. Oxford: Oxford University Press, pages 30-32. Available on line at http://www.undcp.org/adhoc/world_drug_report_2000/report_2001-01-22_1.pdf.

In particular, it has been observed that, when linked to the population of potential cannabis users (which the Centre estimates at some 120 million persons), the estimated global production of 30,000 tonnes is much nearer the 10,000 tonne floor than the 300,000 tonne ceiling.

According to the UNDCP, the main producers are Colombia and Mexico (marijuana) and Morocco (hashish). According to the International Criminal Police Organization (Interpol), Morocco, Afghanistan and Pakistan are the main sources of hashish and Colombia, Niger and South Africa of cannabis. Lastly, according to Labrousse, marijuana production is exploding, with Colombia becoming again the major producer it was in the 1970s, and production rapidly increasing in West Africa (Nigeria, Ghana, Congo, Ivory Coast, Senegal), although the great steppes of the Commonwealth of Independent States (Kazakhstan, Kirghizistan, Ukraine, Belarus and Azerbaijan) have virtually unlimited export potential, while Afghanistan and Pakistan likely produce 2,000 tonnes of hashish, the equivalent of Morocco's production.⁵ In addition, Canada has been a cannabis exporting country for a number of years now.⁶

Traditionally, the cannabis available in Canada comes mainly from Mexico, Jamaica and the countries of the horn of Africa, while hashish originates mainly in Asia and the Middle East:

*The hashish market in Central Eastern Canada is known world-wide. U.S. criminals are among the international traffickers who orchestrate multi-tonne shipments of this drug from Pakistan directly to Montreal by mothership or container. In 2001, some shipments transited the United Arab Emirates, Africa and Europe before reaching Canada. Multi-kilo quantities are also imported from Jamaica by couriers travelling on board commercial airlines.*⁷

While a large portion of cannabis sold in the Canadian market was of foreign origin until the 1980s, the situation has radically changed since that time. It is estimated that national production has now supplanted imports. In its 1999 report, the Royal Canadian Mounted Police writes:

It is estimated that more than 50% of the marihuana available in Canada is produced domestically. Of the foreign marihuana seized in or en route to Canada in 1999, at least 5,535 kilograms originated from Jamaica, 825 kilograms from South Africa and 860 kilograms from Mexico. Foreign shipments arrive directly into Canadian ports of entry or transit through the United States before reaching Canada. On June 11, 1999, U.S. Customs intercepted 2,464 kg of Jamaican marihuana and 141 kg of hash oil at Newark, New Jersey in a marine container bound for Montreal. Furthermore in Project JOULE

⁵ Labrousse, A. (2000) *Drogues. Un marché de dupes*. Paris: éditions alternatives; see also "L'approvisionnement des marchés des drogues dans l'espace Schengen." *Les Cahiers de la Sécurité Intérieure*, 32, 2^e trimestre 1998.

⁶ See, for example, in OGD (1996) *Atlas mondial des drogues*. Paris: PUF.

⁷ Royal Canadian Mounted Police (2002) *Drug Situation in Canada* (2001). Ottawa: author.

on June 20, 1999, 2,617 kg of Jamaican marihuana destined for Canada were seized in Stuart, Florida.⁸

How much cannabis and hashish are available in Canada? What is the monetary value of those drugs? It is in fact impossible to answer these questions, for obvious reasons, since the drugs are illegal. While we know the amount of tobacco produced and sold in cigarette form, and the volume of alcohol produced or imported and consumed, and sales turnover can be calculated in both cases on the basis of those volumes, it is impossible to do this for illegal drugs.

For a time, the United Nations International Drug Control Program suggested that the total value of the illegal drug "industry" was approximately US \$400 billion, greater than the oil industry.⁹ The total value of cannabis obviously cannot be separated from that amount, even though we know that the largest number of persons who use drugs use cannabis. No one really knows how or on what basis these figures are advanced, whether they were produced using a rigorous calculation method or merely noted down on a napkin over a meal.¹⁰ And yet they often serve as a reference. In a series of articles published on the illicit drug issue in 2001, *The Economist* cited the \$400 billion amount before suggesting a more conservative estimate of US \$150 billion.¹¹ By comparison, the value of the pharmaceutical industry is near US \$300 billion, that of the tobacco industry \$204 billion and that of the alcoholic beverages industry \$250 billion.

Since the authors provide itemized accounts of their calculation methods, we will now continue our analysis of the Moroccan example.

⁸ Royal Canadian Mounted Police (2000) *Drug Situation in Canada (1999)*. Ottawa: author.

⁹ UNDCP (2000) *op. cit.*

¹⁰ The Committee invited the Executive Director of UNDCP or a delegate to testify before it, but the invitation was turned down.

¹¹ "Stumbling in the Dark", *The Economist*, July 28 - August 3, 2001.

Yields and Returns from Cannabis – The Case of Morocco

Cannabis is a not very demanding plant that grows in poor soils, which it quite quickly renders unfit for any other form of agriculture. As a result of the illegal nature of this crop, the income it generates is disproportionately high compared to that from legal food and cash crops. It is also a non-perishable product that can be sold from the home, into an ever certain market and on credit. In particular, it enables local populations to improve their living conditions and opens the way to initiatives by the peasants themselves.

Estimates of per-hectare cannabis income vary with soil type, rainfall, degree of irrigation, whether the cannabis is processed into chira (powder), period of sale and other factors. In addition, researchers give various estimates based on the same criteria. This is due to the fact that it is difficult to obtain reliable data from mistrustful peasant farmers. Income from the production of unprocessed kif varies, depending on sources, from 12,450 to 210,000 French francs per hectare.

(...) while cannabis is highly profitable on irrigated perimeters, it is much less so on pluvial lands, particularly in poor years. (...) Many peasant farmers who likely cultivate only 1.5 ha to 3 ha (non irrigated) of cannabis, earn, in poor years, only 20,000 F to 40,000 F from that crop to support families of, in many cases, more than 10 persons.

(But) cannabis is 12 to 46 times more profitable than grain crops.

In 1997, based on production of 1,397 tonnes of hashish for the Rif as a whole, Pascual Moreno estimated the return for Moroccan producers (from the peasant farmer to the major trafficker) at \$1.816 billion. Since a certain number of Moroccan traffickers operate outside the country, Moreno estimated the return to the Moroccan economy from cannabis profits at \$2 billion, compared to \$750 million for textile exports, \$460 million from foreign investments and \$1.26 billion for tourism. He also estimated the profits of European traffickers at \$3 billion (apparently not including street sales).

However, since cannabis is more profitable than any other crop, peasant farmers tend to abandon food crops and to supply themselves from the market. As a result, there is a growing food shortage in the region.

Labrousse and Romero (2001) *op. cit.*: 12-15.

We know of no similar field work for Canada or Mexico. In addition, in Canada, climatic conditions have stimulated development of greenhouse and hydroponic crops, and the ratio of these cultivation methods to soil cultivation methods is not known.

We therefore use the following figures and data on cannabis production, cannabis and hashish imports and the monetary value of those drugs in the Canadian market, with considerable reservation and prudence.

According to the RCMP, *"the annual production of marijuana in Canada [is] at least in the 800 tonne range. This estimate appears overwhelming, however investigators believe it is quite conservative, and it is supported by intelligence and seizures of marijuana in plant and bulk forms."*¹² The same figures are stated in the 1998 and 2002 reports. Note as well that, at 800 tonnes, Canadian production represents approximately 2.5% of global production, as stated by the UNDCP.

In its 1998-1999 annual report, the Observatoire géopolitique des drogues stated that, based on police sources, the value of the illegal drug market in Canada was \$7 billion to \$10 billion a year.¹³ For 2001, the RCMP estimated that the market value

¹² Royal Canadian Mounted Police (2000), *op.cit.*

¹³ World Geopolitics of Drugs (1999) *Annual Report 1998/1999*. Paris: WGD, page 178.

of all illegal drugs was \$18 billion.¹⁴ It is impossible to estimate the share of cannabis and hashish in that total. As we most often do not know the calculation basis for these estimates, they must also be prudently considered. As the Assistant Deputy Solicitor General stated in his appearance before the Committee, the calculation methods, based on the assumption that police and customs organizations seize 10% of all drugs, are unscientific and unreliable.¹⁵ We nevertheless note an apparent inconsistency: the seeming stagnation of cannabis production at 800 tonnes and of hashish imports at 100 tonnes since 1998, as well as the declining prices of heroin and cocaine in a stable, even declining market (RCMP reports) are not consistent with the presumed doubling in total value of the drug market. As a result, in dealing with these various estimates of the quantity of drugs produced and monetary value of the drug market, the Committee often had the impression that, ultimately, no one really knew how big it was.

With regard to hashish, the RCMP believes that it

*is easier to estimate the quantity of hashish entering the Canadian market annually than the quantity of any other illegal drug. Unlike what is observed for other drugs, such as cocaine and marijuana, that can be found across Canada and the United States, hashish use in North America is a localized phenomenon. The drug is very popular in Quebec, Ontario and the Atlantic Provinces, whereas demand is limited elsewhere in Canada and supply is sporadic at best in the northeastern United States. Consequently, Montreal organized criminal groups are specialized in the massive importing of hashish and have a monopoly on its distribution in bulk. In view of these facts and of information on multi-tonne hashish shipments seized in Canada and abroad and on those we know have entered the Canadian market, RCMP analysts estimate that at least 100 tonnes of the drug are imported into Canada each year.*¹⁶

Canada is also an in-transit country for drugs to the United States, and a significant portion of Canadian cannabis is intended for export, in particular to that country.

*Smuggling of Canadian marihuana to the United States remains a source of concern for enforcement officials on both sides of the border. Though this activity is particularly noticeable on the British Columbia-U.S. border, it is not limited to that province. There is intelligence that the Hell's Angels in Quebec are supplying marihuana to their U.S. counterparts. Intelligence also indicates that there is marihuana smuggling activity across the Great Lakes. Despite the foregoing, few U.S. marihuana seizures can be traced back to Canada.*¹⁷

In 1999, Washington officials suggested that Canada could be placed on the list of countries suspected of a soft stance in the fight against drug production and trafficking.

¹⁴ Greater Toronto Area Combined Forces Special Unit (2002) *Fact Sheet - Heroin*. Available on line at: <http://www.cfseu.org/heroin.html>.

¹⁵ Mr. Paul Kennedy, Testimony before the Senate Special Committee on Illegal Drugs, June 10, 2002.

¹⁶ *Ibid.*

¹⁷ Royal Canadian Mounted Police (2000) *op. cit.*

More recently, officials of the Drug Enforcement Administration repeated that Canada's trafficking in cannabis toward the United States was a significant problem. One RCMP officer told a national newspaper that approximately 70% of marijuana grown in Canada wound up in the United States,¹⁸ whereas, according to the 2002 report of the International Drug Control Agency, the figure was approximately 60%.¹⁹ We have heard, and RCMP officers confirmed it, that cannabis from British Columbia has such a high value that it was traded on par with cocaine. According to those police officers specialized in the war on drugs, British Columbia's triple A quality cannabis is worth approximately \$4,000 a pound in Canada and one kilogram of cocaine is currently worth US \$11,000. However, while reference is made to this supposition in the annual report for 1999, it is not confirmed:

*Canadian marihuana is sometimes used as a currency to purchase cocaine that is warehoused in the U.S.A. The exchange ratio is about three to one. Exchanges of one to one have been rumoured but never substantiated. Furthermore, such a rate of exchange does not make sound commercial sense considering that a kilo of cocaine sells for \$13,000 U.S. (in lots of 50 kilos or more) while the wholesale price of a kilo of marihuana ranges around \$6,000 or \$8,000 U.S.*²⁰

In its 2002 report, the RCMP merely mentions the fact that Canadian cannabis is exchanged for cocaine, without saying whether it is on an equal weights basis. We also note a certain inconsistency here as the price of a kilogram of cocaine is expressed in US dollars, whereas that of a kilogram of marijuana is expressed sometimes in Canadian dollars, at other times in US dollars.

British Columbia, Ontario and Quebec are the main producers in Canada. British Columbia's large production can be attributed in particular to suitable climatic conditions, but there are probably also sociocultural explanations, as the Pacific Coast mentality explains in part why cannabis appears to have taken root there to a greater extent.

Cannabis production in British Columbia appears to have increased significantly over the past 10 years, becoming, according to some analysts, one of the province's biggest industries in terms of monetary value, which some analysts set at \$6 billion, whereas, according to some police officers, a conservative estimate would be \$4 billion.²¹ If marijuana sells for \$225 an ounce, at 16 ounces a pound, British Columbia would appear to produce the equivalent of 550 tonnes of cannabis a year, more than two-thirds of the total amount of cannabis circulating in Canada.

¹⁸ National Post, May 17, 2002. The Committee is interested, and somewhat amused, to note that this article and a previous report on the Global television network on May 13, 2002, outlining the concerns of American representatives, followed the Committee's publication of its Discussion Paper.

¹⁹ International Narcotics Control Board (2001) *Report of the International Narcotics Control Board for 2000*. Available on line at: <http://www.incb.org>.

²⁰ Royal Canadian Mounted Police (2000) *op. cit.*

²¹ RCMP, private meeting.

Testifying in Richmond, B.C., on 14 May 2002, RCMP Superintendent Clapham said there were between 15,000 and 20,000 illegal cannabis production sites in British Columbia (figures from the Drug Enforcement Administration), while RCMP narcotics specialists, the next day, put the figure at 7,000. Regardless of the true number, the figures, as may be seen, must necessarily be considered very carefully.

As to growing methods, soil-based production is still the most popular, but the more sophisticated, hydroponic and aeroponic,²² methods are expanding, particularly among criminal gangs that have the necessary infrastructure.

It is not uncommon to find indoor grow operations involving over 3,000 plants. Those figures vary considerably from one province to another, overall less than 10 percent of all marihuana seized in Canada was grown using hydroponics (a method of growing plants with the roots in nutrient mineral solutions rather than in soil). Indoor grow operations still rely mostly on soil-based organic cultivation but hydroponics is gaining in popularity. Despite the availability of highly sophisticated technologies designed to increase the yield even more, most growers do not bother to go to such lengths, preferring simpler and proven methods. Marihuana remains the most popular illicit drug, both in terms of consumption and trafficking. The annual marihuana production has been estimated to be around five million plants. Given the relatively low cost of setting up a grow operation and the considerable profits it generates, this activity has become increasingly attractive, even to otherwise law-abiding citizens. In the majority of regions, large operations are invariably run by outlaw motorcycle gangs, although Asian-based organizations have been making inroads in British Columbia and Alberta. More and more groups are using "crop sitters" and other go-betweens to tend their plantations. This hands-off approach makes it difficult for police to link the operation to the people who are actually behind it. Outdoor crops are often grown on Crown lands located in remote areas in order to reduce the risk of detection.²³

In all, with considerable reservations as to the validity of the data, the Committee submits the following:

	Marijuana	Hashish
Estimated quantity	800 tonnes	100 tonnes
- national production	approximately 50%	?
Source	National production (British Columbia, Ontario, Quebec) Imports: Mexico, Jamaica	Imports: Pakistan, Afghanistan, Morocco
Value (wholesale)	\$2,000 to \$4,000/pound	?
Retail value (ounce)	\$225 to \$250	\$325 to \$350

²² Technique whereby the roots are suspended and sprayed regularly with water enriched with nutrient material, still very rare and the effectiveness of which remains to be proven. (Source: RCMP (2002)).

²³ RCMP, Drug Situation in Canada (1999) *op. cit.*

PROPERTIES OF CANNABIS

Classified in the pharmacopoeia as a hallucinogenic, psychodysleptic or psychotomimetic, cannabis is a disrupter or modulator, that is to say that it alters perceptions and emotions. Classified in the international conventions and national legislation as a narcotic, cannabis belongs to the class of psychotropics which comprises five major groups: depressants (alcohol, Valium), stimulants, minor (coffee, nicotine) and major (cocaine, amphetamines), disrupters (cannabis, LSD), antipsychotics and medication for mood disorders (lithium).

More than 460 known chemical constituents are present in cannabis.²⁴ Of that number, more than 60 are identified as cannabinoids. The main active ingredient in cannabis, which was identified by the team of Dr. Mechoulam in 1964,²⁵ is Δ^9 -tetrahydrocannabinol, common called THC. Other cannabinoids present in Indian hemp include delta-8-tetrahydrocannabinol, cannabiniol and cannabidiol, but they are present in small quantities and have no significant effect on behaviour, compared to Δ^9 -THC,²⁶ although they can modulate the product's overall effect.²⁷ Cannabiniol also has anti-inflammatory effects.

For a better understanding of the effects of cannabis discussed in the following chapters, we will first consider its pharmacological properties. Consequently, readers may skip this technical section without risk of not properly understanding the rest of the report. In the following paragraphs, we first discuss Δ^9 -THC levels and, second, specifically examine the pharmacological properties of that substance.

²⁴ See in particular Grinspoon, L. and J.B. Bakalar (1997) *Marijuana. The Forbidden Medicine*. New Haven and London: Yale University Press; Clark P.A. (2000) "The ethics of medical marijuana: government restrictions vs. medical necessity", *Journal of Public Health Policy*, 21: 40-60; as well as Wheelock (2002) for the Senate Committee.

²⁵ Gaoni, Y. and R. Mechoulam (1964) "Isolation, structure and partial synthesis of an active constituent of hashish", *Journal of the American Chemistry Society*, 86: 1646-1647; and Mechoulam, R. and Y. Gaoni (1965) "A total synthesis of delta-9-tetrahydrocannabinol, the active constituent of hashish", *Journal of the American Chemistry Society*, 87: 3273-3275.

²⁶ Smith, D.E. (1998) "Review of the American Medical Association Council on Scientific Affairs Report on Medical Marijuana", *Journal of Psychoactive Drugs*, 30: 127-136; McKim W.A. (2000) "Cannabis", in McKim, W.A. (ed.) *Drugs and Behavior. An introduction to behavioral pharmacology*. Upper Saddle River: Prentice Hall.

²⁷ Ashton, C.H. (2001) "Pharmacology and effects of cannabis: a brief review", *British Journal of Psychiatry*, 178: 101-106.

Δ^9 THC Concentrations

The Δ^9 THC content of marijuana generally varies in natural growing conditions from 0.5 to 4%.²⁸ Δ^9 THC content serves first as a basis for distinguishing the drug type of plant from the fibre type: permitted concentrations vary by country - in Canada, as in France, it is 0.3% for the fibre type. For more than a decade now, techniques for selecting powerful strains and cultivation (in greenhouses and hydroponically) have made it possible to achieve Δ^9 THC concentrations of 15% or more. Δ^9 THC content is also used to distinguish between various cannabis products and thus to determine their price: the content of sinsemilla, for example, generally varies between 7% and 14% and is more expensive than "regular" cannabis.

The question of Δ^9 THC content, its variability, how it is determined and its effects has raised numerous issues. While all specialists agree that maximum active ingredient concentrations have increased over the past 20 years, opinion is divided on average concentrations in cannabis available on the market. Estimates vary as to the preponderance and consequences of Δ^9 THC concentrations.

First, it should be emphasized that studies show that concentrations are subject to extreme variability, for a number of reasons. First, failing a control system at source, the Δ^9 THC content of marijuana is estimated on the basis of police seizures. However, only a portion of the drug seized is analyzed for THC content,²⁹ and analyses are not all equally reliable, depending on how police or customs officials conducted the seizures and how the products were preserved and transported to the lab. In addition, between a seized product in clandestine lab or at a customs post and the product sold on the street, a number of changes can be made: tobacco, herbs and other products can be added to the gram of "pot" sold at a school which alter the nature of the drug and thus the quantity of active ingredient. This is even truer for hashish, as seen above in the example on processing in Morocco.

Second, since cannabis is a widespread illegal product, it is impossible to take a representative sample of the drug available on the market at a given time for analysis. Thus it is impossible to measure the difference between the Δ^9 THC content of cannabis seized at the production or delivery site and that of cannabis used by individuals. And third, the active ingredient concentration varies with the geographical area of origin, climatic conditions and production conditions. Likely circulating in the

²⁸ Huestis, M.A *et al.* (1992) "Characterization of the absorption phase of marijuana smoking", *Clinical Pharmacology and Therapeutics*, 52: 31-41.

²⁹ Note, for example, that, in the United States, there is no systematic method for measuring THC. As emphasized in a comparative analysis of changes in price of heroin, cocaine and marijuana, "Another problem is that the DEA does not test marijuana for THC content, so there is no marijuana counterpart to the pure grams reported for cocaine and heroin. The difficulty this causes is the STRIDE data provide no basis for adjusting price changes for marijuana's quality." Abt Associates (2001) *The Price of Illicit Drugs: 1981 through the Second Quarter of 2000*. Washington, DC. Report prepared for the Office on National Drug Control Policy.

market at any given time is a significant variety of cannabis products reflecting the diverse conditions in which they were produced. It follows that two samples seized in Vancouver in the same week could have very different concentrations, as would be the case for samples seized the same week in Vancouver, Montreal and St. John's.

Experts told the Committee that cannabis in the Canadian market was 700% more powerful than the same drug in the 1970s. Some suggested that the average Δ^9 THC content of cannabis on the market is approximately 30%, compared to 3% to 4% in the 1970s.

The cannabis used today is up to 500 percent higher in THC - that is a range between five percent to 31 percent - than the cannabis most adults remember from the 1960s and 1970s.³⁰

In its 1999 annual report, the Royal Canadian Mounted Police estimated the average content of seizures at 6%.³¹ In Quebec, the Montreal Police Department asserted that the THC content of cannabis is now 25%. In a private meeting with Committee members, RCMP narcotics experts in British Columbia emphasized that it is *impossible in the current state of affairs to determine the average content of cannabis in the country or in a given province*, in particular as a result of the extreme variability of seizures and methods of analysis. The officers who conduct the seizures do not always pay attention to the manner in which they preserve the product, such that it may lose its Δ^9 THC content: heat, light and humidity affect the stability of cannabis. Lastly, the experts providing cannabis for therapeutic purposes whom we met said they kept various grades of cannabis, based in particular on Δ^9 THC concentrations, and that, in certain cases, the products offered to patients reached concentrations of 27%.

The most exhaustive studies on changes in Δ^9 THC levels in cannabis have been conducted in Australia, the Netherlands, France and the United States. They show, first, that more powerful products have appeared in the market beside the traditional forms of cannabis: "skunk" (a variety originating in the United States and the Netherlands), "super-skunk" and "pollen" (stamens of male plants). Canada has not lagged behind, with *BC Bud* and *Quebec Gold* in particular.

More specifically, the studies on Δ^9 THC concentrations show similar trends:

- In Australia, a study by Wayne and Wendy on 31,000 seizures conducted between 1980 and 1997 shows that average content varied little over the period and was between 0,6 % and 13 %. Among other things, it appears that the main development has been a more significant selection than

³⁰ Testimony of Michael J. Boyd, Chair of the Drug Abuse Committee and Deputy Chief of the Toronto Police Service, for the Canadian Association of Chiefs of Police, Senate Special Committee on Illegal Drugs, Issue No. 14, page 74.

³¹ Royal Canadian Mounted Police (1999), *Annual Report*.

previously of the parts of the plant with the highest concentrations.³² The authors of this study make the following observation which applies equally to Canada:

*A number of factors probably explain the persistence of the belief that the THC content of cannabis plants in Australia has increased 30 fold in the absence of any supporting data. First, defenders of the claim often point to reports of single samples with unusually high THC content tested by the police. At best, such samples indicate the maximum THC content that has been achieved (assuming that there were no errors in the test results) but they do not tell us what the THC content is in the cannabis that is typically used by consumers. Second, biases in the sampling of tested cannabis are amplified by the attention that the print and electronic media give to unusually potent samples, creating the false impression that cannabis with exceptionally high THC is the norm. Third, uncontested repetition of these assertions in the media has established them as "facts"; those who contest these claims are asked to prove that they are false rather than the (usually nameless) proponents being asked to provide evidence that they are true. Fourth, an increase in average THC content seems to explain an apparent increase in the number of cannabis users who experience problems as a consequence of their use.*³³

- In the Netherlands, the *Drug Information Monitoring System* of the Trimbos Institute has conducted various studies since 2000 on average Δ^9 THC content. The local variety, *Nether-Weed*, contained an average of 8.6% THC in 2000 and 11.3% in 2001, whereas imported varieties were stable at approximately 5%. One of the reasons given for this difference was that the local variety was fresher and contained a lower ratio of cannabidiol to Δ^9 THC. In addition, *Nether-Weed* resembles *sinsemilla*, which comes from the unfertilized flowers of the female plant and is cultivated in greenhouses.
- In France, the Roques report referred to concentrations of up to 20% in the case of certain Dutch hydroponic varieties.³⁴ In its recent report, France's *Institut national de la santé et de la recherche médicale* notes a toxicological study conducted by Mura on the Δ^9 THC concentrations of seizures since 1993. From 1993 to 1995, the average concentration was 5.5%, but approximately 8% since 1996, with spikes of up to 22%.³⁵ In 2000, 3% of marijuana samples analyzed contained Δ^9 THC levels of more than 15%.
- Lastly, in the United States, data for 2000 show an average concentration of 6%, compared to 4.1% in 1997. In fact, recalling a study recently conducted in Mississippi, Dr. John Morgan noted:

³² Wayne, H. and S. Wendy (2000) "The THC content of cannabis in Australia: evidence and implications", *Australian and New Zealand Journal of Public Health*. 24: 503-508.

³³ *Ibid.*, page 504.

³⁴ Roques, B. (1999) *La dangerosité des drogues*. Paris: Odile Jacob.

³⁵ INSERM (2001) *Cannabis: quels effets sur le comportement et la santé?* Paris: Les Éditions Inserm.

*(...) in the midst of this furore over the remarkable increases in marijuana potency, it is interesting that the potency of the commercial crop sold in the United States has not varied enormously over the 30 years that potency has been assessed by the analysis of THC content in criminally seized marijuana. In fact, I recently looked at the report, which also comes from Mississippi, that the mean THC content of some 40,000 seizures since 1974 is about three percent. It has gone up in the last 10 years. In fact, in the last 10 years I believe the arithmetic mean is more than four percent while in the 10 years before that it was about 3.5 percent.*³⁶

The following table summarizes some of the data on a historical basis for certain countries.

Year analysed	Domestic Marijuana (USA)			Sinsemilla (USA)		
	Foreign Marijuana (Netherlands)			Nether-Weed (Netherlands)		
	= 3 %	= 5 %	= 9 %	= 3 %	= 5 %	= 9 %
USA, 1996 ¹	63%	25%	3%	93%	77%	49%
USA, 1997 ¹	63%	29%	6%	96%	85%	64%
USA, 2000 ²	Average of 6.07% (DEA)			Average of 13,65% (DEA)		
Netherlands, 2000-2001 ¹	75%	48%	7%	93%	87%	35%
Netherlands, 2001-2002 ¹	80%	55%	4%	100%	99%	78%
Australia, 1997 ³	Between 0.6% and 13%					
Western Australia	Average of 3,8%					
Canada 1999 ⁴	Average of 6%			Not available		

- (1) Source: Rigter H. and M. von Laar (2002) "Epidemiological Aspects of Cannabis Use", International Scientific Conference on Cannabis, Brussels, page 32.
- (2) Drug Enforcement Administration, <http://www.usdoj.gov/dea/concern/marijuana.html>
- (3) Source: Hall, W. and W. Swift (2000) *op. cit.*, page 505
- (4) Source: RCMP, Annual Report for 1999.

In short, it appears that the main change has been in maximum concentrations obtained as a result of sophisticated cross-breeding and cultivation methods, whereas average concentrations have not significantly changed over the past 30 years.³⁷ What conclusion can be drawn from this? In the minds of some, if cannabis could still be called a "soft drug" in the 1970s, that is no longer the case today. Some are not reluctant to say it is a drug comparable to heroin or cocaine in its addictive power. As an example, the Canadian Police Association has issued the following opinion on the risks associated with cannabis.

Generally, marijuana and its derivative products are described [as soft drugs] to distance the drug from the recognized harm associated with other illegal drugs. This has been a successful yet dangerous approach

³⁶ Dr. John Morgan, Professor at the City University of New York Medical School, testimony before the Senate Special Committee on Illegal Drugs, June 11, 2001, Issue No. 4, page 29.

³⁷ ElSohly, M.A., *et al.* (2000) "Potency trends of delta9-THC and other cannabinoids in confiscated marijuana from 1980-1997", *Journal of Forensic Sciences*, 45(1): 24-30.

*and contributes to the misinformation, misunderstanding and increasing tolerance associated with marijuana use. Marijuana is a powerful drug with a variety of effects. (...) Marijuana use is associated with poor work and school performance and learning problems for younger users. Marijuana is internationally recognized as a gateway drug for other drug use. Risk factors for marijuana dependence are similar to those of other forms of drug abuse.*³⁸

Others associated the increase in demand for treatment for cannabis dependence with the increase in active ingredient concentrations. As the National Post reported:

*The potent BC Bud, which has a THC content as high as 25% compared to the 2% typical in the 1970s, is also leading to health concerns in the United States. Admissions for marijuana drug treatment in Washington State now exceed the rate for treatment of alcoholism. Cannabis admissions in Cook County, Ill., have risen by 400% in the last year.*³⁹

Can it be said that cannabis has in fact become a "hard" drug like cocaine and heroin? Apart from the validity of the effects of cannabis itself as described by the Police Association, and as will be discussed in detail in the Chapter 7, that contention does not take into account the way in which the drug is used or the lack of knowledge of the effects of Δ^9 THC concentrations. Studies on the ways in which cannabis is used, considered in Chapter 6, show that regular users appear to prefer medium to mild cannabis, and that they adjust their use to the strength of the drug. Interviews with individuals who use cannabis for medical purposes tend moreover to confirm this perception. More significantly, for lack of any specific studies on the question, the effects of higher Δ^9 THC concentrations are simply not known. Lastly, as will be shown in the following section, the bio-availability of Δ^9 THC, that is to say the proportion that is actually absorbed by the body following combustion, is highly variable. As emphasized in the report of the World Health Organization (WHO) on cannabis, considering all these factors, the actual quantity of THC absorbed by the cannabis user is difficult to estimate.⁴⁰ Ultimately, while it can be a legitimate preoccupation, the real issue of Δ^9 THC content has more to do with our ability to control it and better know its effects, rather than making all kinds of alarmist and unfounded statements about its level.

³⁸ Sergeant Dale Orban, Regina Police, at the Senate Committee hearing on May 28, 2001.

³⁹ National Post, May 17, 2002.

⁴⁰ World Health Organization (1997) *Cannabis: a health perspective and research agenda*. Geneva: WHO, 1997. On line at: www.who.org.

Pharmacokinetics⁴¹

Upon inhalation, and depending on the smoker's way of smoking and smoking experience, between 15% and 50% of the Δ^9 THC present in the smoke is absorbed into the bloodstream. The percentage also depends on the Δ^9 THC concentration in the smoked product. The substance is absorbed very quickly, and maximum blood concentrations are achieved in less than 15 minutes after the start of inhalation. The effects felt almost immediately after absorbing the smoke diminish gradually over the next 60 minutes and generally last a maximum of three hours after inhalation. In other words, THC levels in the blood plasma are highest immediately after absorption, whereas maximum effects are felt approximately 30 to 40 minutes later. The following table reproduced from the INSERM collective assessment, shows the time to appearance and duration of detection of cannabinoids in the blood.⁴²

Concentration, time to appearance¹ and duration of detection² of cannabinoids in the blood after smoking a marijuana cigarette containing 15.8 mg or 33.8 mg of Δ^9 THC

Component	Maximum concentration	Time to appearance of peak (hr)	Duration of detection (hr)
Δ^9 THC	84.3 (50-129) ³	0.14 (0.10-0.17)	7.3 (3-12)
	162.2 (76-267) ⁴	0.14 (0.08-0.17)	12.5 (6-27)
11-OH- Δ^9 THC	6.7 (3.3-10.4)	0.25 (0.15-0.38)	4.5 (0.54-12)
	7.5 (3.8-16.0)	0.20 (0.15-0.25)	11.2 (2.2-27)
Δ^9 THC-COOH	24.5 (15-54)	2.43 (0.8-4.0)	84.0 (48-168)
	54.0 (22-101)	1.35 (0.54-2.21)	152.0 (72-168)

- (1) average interval between start of consumption and appearance of a concentration peak
- (2) average interval between start of consumption and moment when lowest concentration of component is detected (> 0.5 mg/ml)
- (3) cigarette containing 13.8 mg (1.75%) of Δ^9 THC
- (4) cigarette containing 33.8 mg (3.55%) of Δ^9 THC

Bio-availability of Δ^9 THC is slower and weaker when the drug is ingested orally (cookies, cakes, herbal teas): approximately 4% to 12%; although slower to be felt and different in quality, its effects are longer lasting.

In all, we do not know how the effects of THC (concentration) interact with personal factors (way of smoking, health status, alcoholism or medication). However, it is likely that the same THC concentration does not have the same effect on all smokers, which moreover tend to be confirmed by the plasticity of cannabis in the hormonal stream (see below).

⁴¹ This section is based to a large extent on the INSERM 2001 report as well as the European scientific report 2002 and the survey work done by Wheelock 2002 for the Committee.

⁴² INSERM (2001) *Cannabis. Quels effets sur le comportement et la santé?* Paris: author, page 340.

Δ^9 THC is highly lipophilic and is quickly distributed to all fatty tissues, including the brain. It is also characterized by an entero-hepatic cycle and renal reabsorption which results in persistent effects. In a driving simulator study, a significant linear correlation was found up to seven hours following absorption, particularly on the trajectory control.

Δ^9 THC undergoes oxydative metabolism resulting in the production of various elements, in particular 11-hydroxy-tetrahydrocannabinol (11-OH Δ^9 THC) a psychoactive metabolite which, transported by albumin, whereas Δ^9 THC attaches mainly to lipoproteins, penetrates the brain more deeply than Δ^9 THC; 8 β -hydroxy- Δ^9 -tetrahydrocannabinol, potentially psychoactive but whose action would be negligible; and various other components not known for their psychoactive effects. In addition to the potentially psychoactive elements, cannabis contains approximately 200 derivatives of combustion and pyrolysis comparable to those found in tobacco, though some of which are highly carcinogenic and are more concentrated in cannabis smoke than tobacco smoke.

Cannabinoids are eliminated in various ways: through digestion, the kidneys and perspiration. Approximately 15% to 30% of Δ^9 THC in the blood is eliminated in urine, 30% to 65% through stools. Because it binds strongly to tissues, Δ^9 THC is eliminated slowly in urine: the urine of regular heavy users contains traces of Δ^9 THC-COOH 27 days after they have last used cannabis.

Regular users metabolize Δ^9 THC up to twice as fast as individuals who have never previously used the drug. One study showed, in particular, that the intravenous administration of one 5 mg dose of Δ^9 THC resulted in higher blood levels in regular users than occasional users.⁴³

Cannabinoids act on the body through the endogenous cannabinoid system, consisting of neurochemical substances (endogenous ligands) and specific receptors. The behavioural and central effects of cannabis are due to the agonistic action of its main ingredients (in particular Δ^9 THC, exogenous cannabinoid), on the endogenous cannabinoid receptors (anandamide, 2-arachidonoylglycerol) present in the nervous tissues of the brain.

Although the chemical structure of Δ^9 THC was identified by Mechoulam in 1964,⁴⁴ it wasn't until very recently that the characteristics and location of the endogenous cannabinoid system was determined.⁴⁵ Two types of cannabinoid receptors have been isolated: CB1 in 1990⁴⁶ and CB2 in 1993.⁴⁷ CB1 is mainly expressed in the

⁴³ Cited in INSERM (2001) *op. cit.*, page 148.

⁴⁴ Guoli and Mechoulam (1964) *op. cit.*

⁴⁵ Devane, W.A. *et al.* (1992) "Isolation and structure of a brain constituent that binds to the cannabinoid receptor", *Science*, 258 (5090): 1946-1949.

⁴⁶ Matsuda, L.A. *et al.* (1990) "Structure of a cannabinoid receptor and functional expression of the cloned DNA", *Nature*, 346(6284) 5561-564.

central and peripheral nervous system. CB2 is expressed essentially in the cells of the immune system. It follows from this distribution that CB1 is essentially involved in psychotropic effects and CB2 in immunomodulatory effects.

The main endocannabinoids are arachidonylethanolamide (also called anandamide - a word derived from Sanskrit, literally meaning congratulated) and 2-arachidonoylglycerol (2-AG). These are the only two endogenous molecules known to be capable of binding to cannabinoid receptors CB1 and CB2 and replicating the pharmacological and behavioural effects of Δ^9 THC. Anandamide levels in the brain are comparable to those of other neurotransmitters such as dopamine and serotonin. The highest levels corresponding to high CB1 density areas, that is to say the hippocampus, striatum, the cerebellum and the cortex. Like anandamide, 2-AG reproduces all the behavioural effects of Δ^9 THC or anandamide, but its action is less powerful.

The CB1 receptors are among the most abundant neuronal receptors in the central nervous system, and their distribution correlates remarkably with the behavioural effects of cannabinoids on memory, sensory perception and control of movements, as shown in the table below.

Location of CB1 receptors in the CNS and correlated pharmacological effects ⁴⁸

Structures	Marking	Physiological consequences	References
Forebrain			Herkenham et al., 1990
Amygdala	+		Herkenham, 1992
Olfactory systems	+		Tsou et al., 1998, 1999
Cerebral cortex	++	Cognitive effects	Katona et al., 1999
Basal nuclei	++	Locomotive effects	Rinaldi-Carmona et al., 1996
Hippocampus	++	Cognitive effects (short-term memory inhibition) and antiepileptic action	Matsuda et al., 1990, 1993 Hohmann, 1999
Thalamus/hypothalamus	+	Endocrine and antinociceptive effects	Marsiaco and Lutz, 1999 Westlake et al., 1994
Midbrain	-		
Grey nucleus	-		
Colliculi	-		
Optic nuclei	-		
Black substances/ventral tegmental area	-		
Hindbrain			
Grey periaqueductal area	+	Antinociceptive effects	
Locus ceruleus	-		
Raphe	-		

⁴⁷ Munro, S. *et al.* (1993) "Molecular characterization of a peripheral receptor for cannabinoids", *Nature*, 365: 61-65. Note that a recent scientific conference of the National Institute on Drug Abuse in the United States reported on the work of researchers on the hypothesis that there are additional receptors and other ligands. To our knowledge, the latter have not yet been formally identified in the research setting.

⁴⁸ Table reproduced from INSERM (2001), *op. cit.*, page 298.

Structures	Marking	Physiological consequences	References
Bridged nucleus	-		
Brainstem	-	No lethal dose, no acute mortality	
Cerebellum	++	Motor effects (balance)	

++: abundant marking; +: intermediate marking; -: little or no marking.

This concentration of CB1 receptors largely explains the effects of Δ^9 THC. Intense expression of CB1 receptors in the basal nucleus and molecular layer of the cerebellum is thus consistent with the inhibiting effects of cannabinoids on psychomotor performance and motor coordination. Their expression in the cortex and hippocampus is consistent with the modulation of elementary forms of learning, explaining in particular the reversible deleterious effects on short-term memory and cognitive function. Their lack of marking in the brainstem explains the absence of acute toxicity or lethal doses of cannabis derivatives. The CB1 receptors in the thalamocortical system participate in the sensory disturbances and analgesic properties of cannabis. Similarly, the presence of receptors in the periaqueductal area and the dorsal horn of the spinal cord contribute to its antinociceptive power.

We also note that the CB1 receptors do not merely inhibit brain function. As a result of circuit effects, cannabinoids can stimulate certain neuron populations, in particular dopaminergic cells in the mesolimbic pathway. Together with the observation that prolonged treatment with cannabis (at doses corresponding to the equivalent of 575 cannabis cigarettes a day!) appears to induce lasting adaptive changes to the central nervous system and to the positive relationship between cannabinoids and stress hormones (corticotrophine), this explains the difficulties (irritability, sleep disorders and so on) observed in regular users when they have stopped using cannabis. We return to this issue in the Chapter 7 in the discussion on cannabis tolerance and dependence.

Lastly, recent works suggest there are significant interindividual variations in the effects of cannabinoids depending on sex steroid hormones in men and women: it appears that the effects of exogenous and endogenous cannabinoids can be modulated by the hormonal state of each individual and that, in exchange, the CB1 receptors and endocannabinoids are able to regulate hormonal activity.

As was observed in the WHO report in 1997, various research questions remain unanswered, in particular how and to what extent cannabis use alters the endogenous cannabinoid and what the relationship is between blood plasma cannabinoid levels and induced behavioural effects.

CONCLUSIONS

In conclusion, the Committee makes the following findings:

Conclusions of Chapter 5

On production

- The size of the cannabis market is estimated at 800 tonnes a year.
- The size of the national production has significantly increased, and it is estimated that 50% of cannabis available is now produced in the country.
- The main producer provinces are British Columbia, Ontario and Quebec.
- Estimates of the monetary value of the cannabis market are unreliable. For example, if 400 tons are grown yearly in Canada, at a street value of \$225 per ounce, the total value of the Canadian production would be less than \$6 billion per year, less than the often quoted value of the BC market alone.
- An unknown proportion of national production is exported to the United States.
- A portion of production is controlled by organized crime elements.

On THC

- THC is the main active ingredient of cannabis; in its natural state, cannabis contains between 0.5% and 3% THC.
- Sophisticated growing methods and genetic progress have made it possible to increase THC content in recent years, but it is impossible to estimate the average content of cannabis available in the market; it is reasonable to consider that content varies between 6% and 31%.
- THC is fat soluble and readily spreads in the innervated tissues of the brain; it reaches a peak in the blood plasma in less than nine minutes and falls to approximately 5% after one hour.
- The body is slow to eliminate THC and inactive THC metabolites can be detected in urine up to 27 days after use in the case of regular users.
- Psychoactive effects generally last two to three hours and as many as five to seven hours after use.

CHAPTER 6

USERS AND USES:

FORM, PRACTICE, CONTEXT

Who uses cannabis? How do the patterns of use in Canada compare to those in other countries? In what context is cannabis used? Why? What populations are most vulnerable? What are the social consequences of cannabis, specifically on delinquency and criminal behaviour? Most important, what trajectories do cannabis users follow, specifically with respect to consumption of other drugs?

Partial answers to these questions, at the very least, are prerequisite to establishing policy on a substance. If the aim is to deter, one needs to know what is to be deterred and within what target group. If the aim is to help people for whom consumption poses a problem, one must have at least an idea of the composition and size of the group in question. And if one is looking for indications that a public policy reduces all use or at-risk use, then knowing the evolution of patterns of use within a population is a requisite.

In Canada, knowledge of patterns and contexts of cannabis use verges on the abysmal. In the early 1980s, the USA, the United Kingdom, and Australia introduced monitoring systems for the general population and the student population and use them as the basis of annual (USA) or biannual (United Kingdom and Australia) reports on trends. In the last five years, a number of European countries have introduced data collection systems as part of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Canada, by contrast, has carried out only two epidemiological general population surveys specific to drugs (1989 and 1994), and only some provinces conduct surveys of the student population, using different methods and instruments that preclude data comparison. Furthermore, everything suggests that few sociological or anthropological studies are conducted on the circumstances or context of illegal drug use (specifically for cannabis). At any rate, very little has been brought to our attention. The result is that our pool of knowledge on users and characteristics of use is lacking.

We have no explanation for this situation, at least no satisfactory explanation. In the 1970s, following up on the work done by the Le Dain Commission, Canada could have set up a trend monitoring system. In the 1980s, when Canada's Anti-Drug Strategy—to which the federal government allocated \$210M over five years—was adopted, a data collection system could have been created. The fact that it wasn't could

be due to an absence of leadership or vision; a fear of knowing; the division of powers among levels of government; or the absence of a socio-legal research tradition within the departments responsible for justice and health. In fact, all of the above are probable factors. Whatever the case, it is our contention that the situation, unacceptable by definition, requires timely remedial action. We must resign ourselves to working with the scarce available data, and more significantly the virtually non-existent comparable data. We will also look at studies and data from other countries.

The chapter is divided into four sections. The first covers consumption patterns in the population as a whole and specifically in the 12-18 year age group and compares the patterns in various countries. The second section looks at what we know about reasons for and details on use, including origins and cultural differences. The third section deals specifically with cannabis user trajectories, including escalation. The fourth and last section covers the relationship between cannabis use and delinquency and crime.

PATTERNS OF USE

Epidemiological surveys are the main method of measuring consumption patterns. These surveys cover the general population (usually 15 years of age and over) and specific populations, usually students. Most epidemiological surveys of the general population are done by telephone and based on a validated questionnaire. Personal interviews are involved in some cases. Some surveys of students are based on a questionnaire distributed in class.

Due to the low consumption of illegal drugs by the population as a whole, samples must necessarily be large (in Canada over 12,000 respondents). Whatever the sample size, these surveys inevitably underestimate consumption. Respondents tend to under-report, either because individuals simply refuse to respond because of the legal implications, or because some at-risk persons are not included in a telephone survey. Then there is the matter of memory: the more time elapsed between consumption and the survey, the less reliable one's memory of occasions, circumstances, and quantities.

Furthermore, some reports, including the report by the French National Institute for Health and Medical Research (INSERM) and the *Canadian Profile* of the Canadian Centre on Substance Abuse (CCSA), use data on police and customs seizure as indirect indicators of use. We have opted to discuss data on seizures and other police and customs activities in Chapter 14. In our opinion, these data, rather than accurately reflecting use, are indicators of police drug-related activities and to some extent, market conditions.

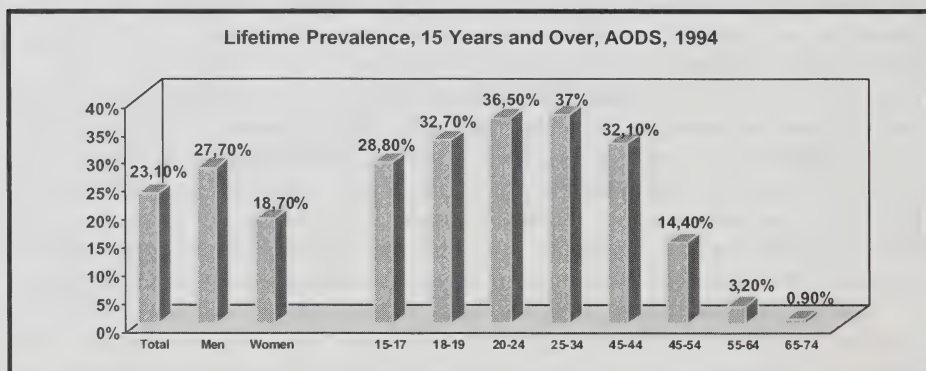
Not all surveys measure phenomena in the same way, although, in the past two years, significant strides have been made toward improving data comparability. Generally speaking, lifetime prevalence (minimum one time consumption) is measured.

This episodic or experimental consumption is distinguished from consumption within the previous year. Frequent consumption (e.g., within the past month) is less frequently measured. Heavy users are even more rarely studied. Furthermore, regular consumption tends to be measured in terms of dependency criteria - described in detail in the following chapter - rather than quantity-related indicators. As described in greater detail later in this chapter, this makes it difficult to distinguish among categories of users, specifically at-risk users and heavy users. Such information is essential to identifying target groups for preventive measures.

Consumption by the population as a whole

In Canada, five national surveys are the sources of data on consumption of psychoactive substances, alcohol, tobacco, and illegal drugs. The Health Promotion Survey (HPS) was conducted in 1985 and 1990; the Alcohol and Other Drugs Survey (AODS) in 1989 and 1994. The 1993 General Social Survey (GSS), a survey conducted on a regular basis, includes drug-related data. These are the data referred to in the following paragraphs.

In the 1994 survey, 23% of respondents reported consuming cannabis at least once in their lifetime. As shown in the bar graph below, men are more likely than women to have consumed cannabis, as are persons under 35 years of age.



Consumption varies by province. According to the AODS, consumption is highest in British Columbia (35.4%), followed by Alberta (29.4%), Manitoba (25.2%), Nova Scotia (25.1%) and Quebec (24.7%); and lowest in Newfoundland (16.3%), Ontario (16.6%) and Prince Edward Island (18.6%).

Lifetime prevalence was unchanged from the 1989 study. At the time of the Le Dain Commission, in 1970, the figure stood at 3.4%; by 1978 it was up to 17%, showing a steady increase in cannabis consumption.

Prevalence over the previous twelve months is a more sensitive indicator of current consumption as reporting is less dependant on long-term memory. The following table shows the evolution of this indicator beginning with the 1985 study.

Cannabis consumption in the last 12 months, 15 years and over¹

Year	Survey	Sex		Total
		Men	Women	
1985	Health Promotion Survey	6.9%	4.3%	5.6%
1989	National Alcohol and Other Drugs Survey	8.9%	4.1%	6.5%
1990	Health Promotion Survey	7.0%	3.0%	5.0%
1993	General Social Survey	5.9%	2.5%	4.2%
1994	National Alcohol and Other Drugs Survey	10.1%	5.1%	7.4%

By comparison, the percentage of users in the last year was 1% in 1970 and 9.7% in 1979.

The rate of use reported in these surveys is twice as high for men as for women. It is important to note the variations among studies. Because the AODS deals specifically with psychoactive substances, rather than being part of a broader survey of health or living conditions, it would appear to be more reliable.

We have no detailed data on incidence (i.e., new consumers) or rate of discontinuation. As will be seen further on, rising prevalence among young people would indicate increased incidence. With respect to discontinuation, it is generally believed that the vast majority of users do not continue using, although we are lacking specific information in Canada on this issue.

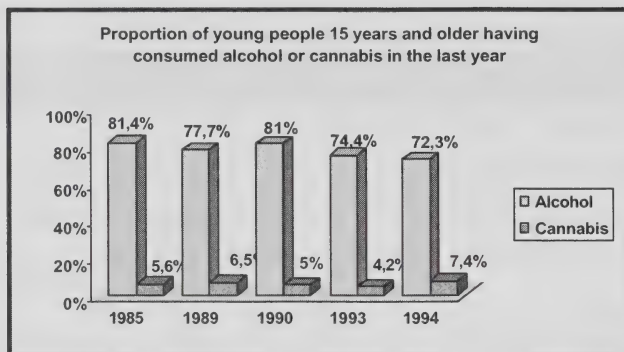
We are aware that there are limitations to comparing the various psychoactive substances. As properly pointed out by Dr. Zoccolillo in his testimony, each has its own characteristics and effects.

There is little point in comparing the levels of harm from cocaine, marijuana and alcohol. Each drug has specific kinds of harm. If you were to compare the effects of tobacco and cocaine in young people, you would conclude that cocaine is terrible but tobacco is not worth worrying about, because the harm from

¹ Table reproduced from CCSA-CAMH (1999), *Canadian Profile. Alcohol, tobacco and other drugs*. Ottawa: author, page 142.

*tobacco takes 30 years to appear. The point is that there are different patterns of harm and making comparisons among them is not a useful exercise.*²

Nonetheless, to place the phenomenon in context, we believe it is valid to compare Canada's consumption of cannabis in the general population to consumption of other substances. The 1994 Alcohol and Other Drugs Survey shows that, of total illegal drug consumption, cocaine accounts for less than 1%, and heroin, LSD, and



amphetamines together for approximately 1%. In the case of legal drugs, alcohol consumption is about 75%, tobacco approximately 30%. The accompanying graph compares consumption of cannabis and alcohol among those over 15 years of age.

General population studies have been conducted in Ontario since 1977, giving the province the most extensive database in Canada. Of even greater interest, is the fact that Ontario (again since 1977) has conducted studies in schools. This practice provides for a better tracking of trends.

According to the 2000 report of the Centre for Addiction and Mental Health (CAMH)³, more than one third (35%) of Ontarians over 18 years of age have consumed cannabis at least once in their lifetime and 10.8% within the last 12 months. The figure for users within the past year has changed little since 1984 (11.2%), although it is up slightly from the 1977 figure (8%). The 18-29 age group shows the steadiest increase, from 18.3% in 1996 to 28.2% in 2000; the 1984 figure for the cohort is 28.5%. In the long term, we also see an increase in consumption within the last 12 months in the 30-49 age group (from 6.5% in 1977 to 18.7% in 2000). The following table sets out selected data from the report.

² Testimony by Dr. Mark Zoccolillo, Professor of Psychiatry and Pediatrics, McGill University and Montreal Children's Hospital, Special Senate Committee on Illegal Drugs, second session of the thirty-sixth Parliament, October 16, 2000, Issue 1, page 80.

³ Adlaf, E.M. and A. Ialomiteanu (2000) *CAMH Monitor Report: Addiction and Mental Health Indicators among Ontario Adults, 1977-2000*. Toronto: Centre for Addiction and Mental Health, pages 61-67.

Proportion of Ontarians 18 years old and over using cannabis users in the previous 12 months

(N =)	1977 (1059)	1982 (1026)	1984 (1043)	1987 (1075)	1989 (1098)	1991 (1047)	1992 (1058)	1994 (2022)	1996 (2721)	1997 (2776)	1998 (2509)	1999 (2346)	2000 (2406)
Total	8.1	8.2	11.2	9.5	10.5	8.7	6.2	9.0	8.7	9.1	8.6	10.4	10.8
M	11.2	12.3	15.6	12.3	13.0	11.5	9.1	11.4	12.6	11.4	12.1	13.2	14.3
W	4.5	4.1	7.1	6.8	8.2	6.0	3.6	7.0	5.3	7.0	5.4	7.8	7.7
18-29	22.6	22.7	28.5	20	24.6	19.9	13.3	19.6	18.3	21.4	25.2	27.1	28.2
30-39	3.9	4.2	9.5	11.6	11.8	9.1	6.6	10.2	11.3	9.8	8.2	10.3	12.3
40-49	2.3		2.2	5.4	3.9	3.0	2.4	4.3	6.1	4.3	4.	6.8	6.4
50-64	1.2	1.3	1.8		1.4		1.3			1.7	1.4	4.1	2.9
65+													

Of those who consumed cannabis at least once in their lifetime, 68% did not consume within the last 12 months, 15% consumed less than once a month, and 17% more than once a month. Of users within the last year, 47% consumed less than once a month and 53% at least once a month.

In Quebec, general population studies were done in 1987, 1992, and 1998. *L'enquête sociale et de santé* (ESS)⁴ reports that 31.3% of people 15 and over used cannabis or another illegal drug at least once in their lifetime, and 13.5% had consumed cannabis at least once in the past few months. As elsewhere, consumption is a function of age: in the 15-24 age group, consumption of illegal drugs is 39.7%; it is 18.4% in the 25-44 age group, 8% in the 45-64 age group, and 5.5% in the 65 plus age group. Although 83.7% of the 45-64 age group and 93.8% of the 65 plus age group report never having used a prohibited drug, over 40% of the 25-44 age group and half (50.3%) of the 15-24 age group report current or past consumption.

Consumption among young people

A number of witnesses have reported “worrying” increases in cannabis consumption among young people (under 18).

*Given the existing research on the escalating rates of cannabis use in the general population of young people, our street youth and our youth at risk, coupled with knowledge about the harms associated with drug use, we know that our problem is growing.*⁵

⁴ Chevalier, S., et O. Lemoine (2000) « Consommation de drogues et autres substances psychoactives. » in *Enquête sociale et de santé 1998*, Québec : Institut de la Statistique du Québec, chapitre 5, page 137.

⁵ Testimony of M.J. Boyd, Chair of the Drug Abuse Committee and Deputy Chief of the Toronto Police Service, Canadian Association of Chiefs of Police, Special Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, March 1, 2002, Issue 14, page 77.

*Special consideration needs to be given to minors when developing drug policy. A policy created only with adults in mind may have strong, unintended negative consequences for adolescents. We have a parental obligation to adolescents. They are not adults.*⁶

*The Ontario students survey is equally disconcerting. A dramatic upswing is noted in the use of all drugs since 1993.(...) The use of cannabis has more than doubled to 29 per cent.(...) Unfortunately, the only statistic that has decreased is the one that records the students who do not use drugs. That figure has decreased from 36 per cent to 27 per cent. From almost one-third of the students not using drugs, we now have almost a one-quarter of the students not using drugs. We are clearly in a time where young people are turning to drugs as an answer to life's problems.*⁷

It is a fact that consumption of psychoactive substances by young students has increased significantly in the past several years. Nationally, the survey conducted among Grade 6, 8, and 10 students (approximately 2,000 young people in each grade) in 1990, 1994, and 1998⁸, reports the following with regard to marijuana use:

Proportion of Grade 8 and 10 students who have consumed cannabis at least once

	1990	1994	1998
Grade 8			
girls	10%	11%	18%
boys	11%	13%	21%
Grade 10			
girls	24%	27%	41%
boys	26%	30%	44%

Surveys on consumption of psychoactive substances, including cannabis, among young people have been conducted in some provinces. These give a clearer and more detailed picture of the evolution of cannabis consumption among young people in those provinces, although the results cannot be compared from province to province.

Atlantic

In the Atlantic provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick) identical comprehensive surveys on cannabis consumption by high school students were first conducted in 1996.⁹ The process was

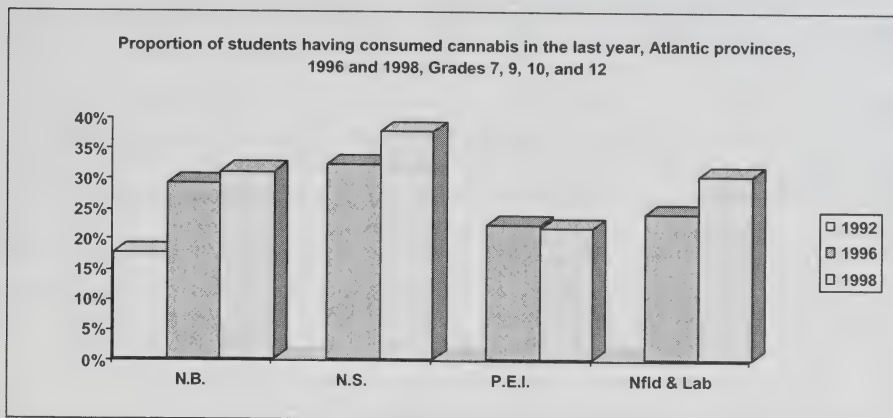
⁶ Testimony of Dr. Mark Zoccolillo, *op. cit.*, page 77.

⁷ Testimony of R.G. Lesser, Chief Superintendent, Royal Canadian Mounted Police, Special Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, October 29, 2001, Issue 8, page 9.

⁸ King, A.J.C. et al., (1999) *Trends in the Health of Canadian Youth. Health Behaviours in School-Age Children*. Ottawa: Health Canada.

⁹ New Brunswick conducted student population studies in 1986, 1989, and 1992.

repeated in 1998. The 1996 survey covered 14,908 students and the 1998 survey, 13,539 in grades 7, 9, 10, and 12.¹⁰ The following graph illustrates the data from the two surveys and the 1992 reference year for New Brunswick.



Cannabis consumption among students in the Atlantic provinces rose from 28% in 1996 to almost 33% in 1998. The provincial trends follow.

❖ In Nova Scotia, between 1991 and 1998:

- The percentage of students using illegal drugs nearly doubled;
- The percentage of students reporting consumption of cannabis within the last year was close to 38% in 1998, compared to 32% in 1996;
- Distribution by school grade: 11.4% in Grade 7, 41% in Grade 9, 47.6% in Grade 10 and 51.7% in grade 12;
- The percentage of students using cannabis more than once a month tripled, from 4.4% to 13.5%; more men (17.5%) than women (9.3%) consumed cannabis once a month.

❖ In New Brunswick:

- The proportion of students reporting cannabis consumption climbed from 17.4% in 1992 to 29% in 1996 and 31% in 1998;
- Among cannabis users, 5.5% experimented during the year and 11% were frequent users (more than once a month);

¹⁰ See <http://www.gov.ns.ca/health/student-drug-use/contents.htm> for Nova Scotia and <http://www.gnb.ca/0378/en/sdus1998/index.htm> for New Brunswick. A summary is also available on the CCSA's website at: <http://www.ccsa.ca/Reports/STUDENT.HTM>

- As in the other provinces, more men (33.4%) than women (28.3%) consumed cannabis.

By comparison, in 1996 56% of students in the Atlantic provinces reported consuming alcohol at least once during the last year; the corresponding figure for 1998 is 59%.

Manitoba

In Manitoba, a 2001 non-random survey of schools in the province was conducted among 4,680 students in 32 schools.¹¹ Although the sample is not completely representative of all students in Manitoba, it is sufficiently large to give a satisfactory representation of the situation in the province.

Virtually all students reporting consumption of illegal drugs in the course of the preceding year used marijuana (96%). 47.7% of students consumed it at least once in their lifetime, 39.7% in the course of the preceding year (compared to 37.4% in 1995 and 38.8% in 1997). The mean age of initial use is 14.1 years. More boys (40.4%) than girls (35.4%) consumed cannabis in the course of the preceding year. Of the users, 8.5% consumed it approximately once a month and 15.8% more than once a month (20.5% of boys and 11.2% of girls).

By comparison, 87.4% of students consumed alcohol at least once in their lifetime, and 80.4% at least once in the course of the preceding year. The mean age of first consumption is 13.3 years. Of those who consumed alcohol in the course of the preceding year, 26% reported consumption once or more weekly, 46.5% at least once a month. Weekly consumption rises with school grade, from 17% in the 1st year of high school to 33% in the 4th. Finally, 27.7% of students consumed cannabis, alcohol, and tobacco in the course of the preceding year.

Ontario

In Ontario, in the 2001 Ontario Student Drug Use Survey (OSDUS)¹² an average of 33.6% of young people in Grade 7 to Grade 13 report using cannabis at least once, and 29.8% in the past several months (the corresponding figures for tobacco are 33.8% and 23.6%; for alcohol 70.6% and 65.6%). Rate of use is significantly higher for boys than girls. Examination of changes in trends shows that, following a dip in the early 1990s, the results in the two most recent surveys are similar to those in the late '70s and early '80s.

¹¹ Patton, D., et al., (2001) *Substance use among Manitoba high school students*. Winnipeg: Addictions Foundation of Manitoba. Available at www.afm.mb.ca

¹² Adlaf, E.M. and A. Paglia (2001) *Drug Use among Ontario Students 1977-2001. Findings from the OSDUS*. Toronto: Centre for Addiction and Mental Health.

Proportion of Ontarians in grades 7 to 13 using cannabis in the previous 12 months

(N =)	1977 (4687)	1979 (4794)	1981 (3270)	1983 (4737)	1985 (4154)	1987 (4267)	1989 (3915)	1991 (3945)	1993 (3571)	1995 (3870)	1997 (3990)	1999 (2868)	2001 (2326)
Total	25.1	31.7	29.9	23.7	21.2	15.9	14.1	11.7	12.7	22.7	24.9	29.2	28.6
M.	29.4	36.4	33.2	28.0	24.4	18.7	14.7	13.2	14.8	25.7	25.7	32.5	32.1
W.	21.1	26.	26.3	19.4	17.9	13.2	13.5	9.9	10.7	19.8	24.1	25.8	25.1
7th	5.6	10.4	5.7	5.2	4.7	3.8	0.9	0.7	1.7	2.8	3.4	3.6	5.1
8th	-	-	-	-	-	-	-	-	-	-	-	-	-
9th	23.2	29.2	27.1	25.1	18.3	12.1	12.9	8.1	8.7	19.6	23.9	25.5	28.8
10th	-	-	-	-	-	-	-	-	-	-	-	-	-
11th	39.4	50.2	44.2	42.1	35.1	24.3	22.5	20.2	22.3	40.7	42.0	48.1	45.7
12th	-	-	-	-	-	-	-	-	-	-	-	-	-
13th	42.4	43.6	37.4	36.5	30.8	30.5	28	20.5	21.6	27.5	31.9	43.3	43.9

Comparison of cannabis use trends to trends for other substances shows that:

- In the past 12 months, tobacco consumption fell from 30.4% to 22.3% of students;
- In the past 12 months, alcohol consumption fell from 76.3% to 62.6% of students;
- Heroin [heroin being a female hero] consumption slipped from 2.0% to 1.2%;
- Cocaine consumption remained steady at 3.8%;
- Amphetamine consumption edged up from 2.7% to 3.1%; and
- Ecstasy consumption shot up from 0.6% in 1993 (first inclusion) to 6.0% in 2001.

The Ontario survey examines frequency of consumption. Of those who used cannabis in 2001, 25% did so once or twice, 30% from 3 to 9 times, and 45% more than 10 times. Overall, 16.9% of students consumed cannabis at least 6 times in the course of the past 12 months. The following table illustrates the evolution of consumption frequency in the preceding 12 months (1981 base year).

Frequency of consumption in the preceding 12 months among users in Ontario¹³

	1981 (1002)	1983 (1304)	1985 (907)	1987 (701)	1989 (570)	1991 (515)	1993 (455)	1995 (873)	1997 (1019)	1999 (778)	2001 (636)
Freq.											
1-2	28.2	32.4	33.7	39.8	42.6	37.1	41.1	31.7	29.5	28.8	25.6
3-5	12.4	15.1	18.3	16.2	17.2	17.7	17.5	17.1	16.3	14.7	17.1
6-9	14.0	12.5	11.3	9.0	10.5	12.2	10.1	10.4	12.4	13.9	11.4
10-19	13.0	11.4	11.3	14.1	11.8	9.8	9.0	12.5	12.3	11.9	14.9
20-39	10.7	9.0	8.3	6.2	8.3	8.9	8.8	9.0	9.8	9.5	10.2
40 +	21.7	19.5	17.1	14.8	17.1	14.3	13.6	19.4	19.7	21.2	20.9

¹³ Table reproduced from Adlaf and Paglia, *op. cit.*, page 57.

On a smaller time scale, the study looks at consumption over the past four weeks. Overall, 8.4% of students consumed cannabis weekly, and 3.1%, daily. The proportion of students who did not consume cannabis in the past month fell from 90.2% in 1987 to 66.6% in 2001.

The following table illustrates the evolution of monthly consumption among users over the preceding 12 months for the 1987-2001 time period. There is a marked reduction in the percentage of students who had used no cannabis in the past month (from 41% in 1987 to 30% in 2001) and, conversely, an increase in the number of students who used it daily (from 3.5% in 1987 to 9.1% in 2001).

Frequency of monthly usage among users in the preceding 12 months, OSDUS¹⁴

	1987 (701)	1989 (570)	1991 (515)	1993 (455)	1995 (873)	1997 (1019)	1999 (778)	2001 (636)
Never								
Total	41.1	46.0	44.1	37.2	30.9	33.0	30.5	30.6
Men	38.1	44.8	38.6	29.7	28.4	28.9	28.5	23.2
Women	45.3	47.2	51.8	47.5	33.8	36.9	33.0	39.8
1-2 times a month								
Total	36.6	38.3	34.5	36.9	35.7	34.2	34.8	33.2
Men	36.7	33.8	33.4	35.8	33.8	30.4	31.1	32.9
Women	36.4	42.9	36.0	38.1	37.9	37.9	39.4	33.6
1-2 times a week								
Total	9.7	9.6	7.9	9.9	14.4	13.7	12.5	11.3
Men	9.8	10.6	8.7	12.7	15.5	14.6	12.9	12.
Women	9.5	8.5	6.7	6.1	13.2	12.8	12.0	10.1
3-4 times a week								
Total	4.9	2.6	5.8	5.9	9.2	7.6	8.5	8.3
Men	4.6	4.8	8.5	7.4	9.4	10.2	10.2	9.9
Women	5.5	0.4	2.0	3.8	9.0	5.1	6.3	6.4
5-6 times a week								
Total	4.1	1.0	2.4	5.1	3.6	3.9	4.4	7.4
Men	5.3	1.9	3.2	7.5	4.4	4.5	5.9	7.5
Women	2.5		1.2	2.0	2.5	3.4	2.6	7.3
Daily								
Total	3.5	2.6	2.6	5.0	6.3	7.6	9.3	9.1
Men	5.6	4.1	4.1	6.9	8.6	11.4	11.3	14.3
Women	0.8	1.1	1.1	2.4	3.6	3.9	6.6	2.8

¹⁴ *Ibid.*, page 58.

OSDUS also provides information on quantity consumed. Among 2001 users over the past 12 months, 15% smoked less than one joint, 21% approximately one, 22% two or three, and 15% more than four. The study also looks at the question of age at the time of first consumption. Again in 2001, 10.2% of students used cannabis for the first time, including 31.7% of cannabis users over the past 12 months. The age of initial use does not vary with sex or region, but is significantly linked to educational level: between Grade 8 and Grade 9 (14-15 years of age), the proportion of those who have smoked cannabis shoots up from 6% to 14.9%. Early initiation (Grade 7, approximately 12 years of age) to cannabis has fallen over the years: in 2001, 2% of Grade 7 students said they had used cannabis at least once in the preceding year (at about 11 years of age), a figure below those for 1997 (5%) and 1991 (8%).

Quebec

In Quebec, some observers report a “disturbing” increase in regular consumption of cannabis by young people. According to Michel Germain, Director of the CPLT, increased use is closely related to social values, specifically messages relating to a relaxed attitude to drug use, as opposed to socio-demographic factors such as family income or composition.

The data available are not directly comparable to those collected in Ontario. They come from three general population surveys conducted by *Santé Québec* in 1987, 1992, and 1998 and cover the 15-24 year age group. Respondents numbered 3,136, 3,912, and 3,587 respectively, and were divided into three age groups (15-17, 18-19, and 20-24).¹⁵

At first glance, the study reveals a statistically significant drop between 1987 and 1998 in the number of young people who report no drug consumption (71.3% in 1987, 57.4% in 1992, and 50.3% in 1998). The figures for “current” consumers (last 12 months) are 39.7% for 1998 and 27% for 1992. By age group, the increase in illegal drug consumption (significant in each case to $p < .001$) is as follows:

- 15 – 17 years: 26.2% to 37.6%
- 18 – 19 years: 28.1% to 41.6%
- 20 – 24 years: 26.2% to 40.3%

Among drug users, the percentage of those who use marijuana exclusively climbed from 15% in 1992 to almost 26% in 1998, whereas the proportion of those who use other drugs remained steady at approximately 13%.

¹⁵ Vitaro, F, Gosselin C. and A. Girard (2002) *Évolution de la consommation d'alcool et de drogues chez les jeunes au Québec de 1987 à 1998: constatations, comparaisons et pistes d'explication*. Montréal: Comité permanent de lutte à la toxicomanie.

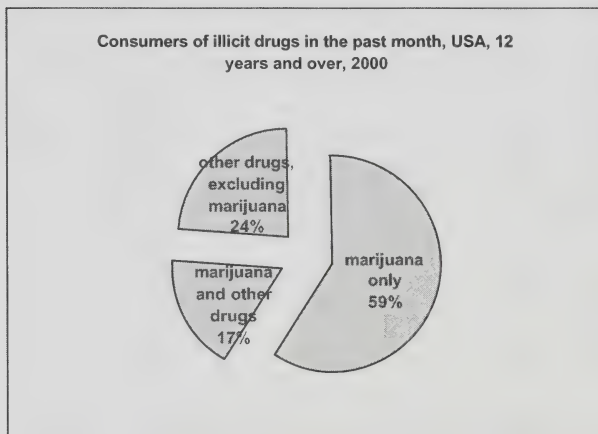
Use patterns in other countries

Obviously, use patterns are not immediately comparable from one country to another, not only because of cultural differences but because the systems for collecting data on use patterns do not all measure the same things in the same way, or even for the same time period. In Europe, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is gradually working toward uniformization of data collection in the various countries of the Union with a view to improving comparability. Nonetheless, significant differences among countries remain.

In spite of these reservations, it is interesting to compare use patterns among the various countries. We will begin by looking at the situation in the United States, the United Kingdom, France, and the Netherlands, and then attempt to compare some of the indicators selected.

United States

In the United States, two major surveys have been conducted for a number of years: a general population survey conducted by the Department of Health and Social Services, and the University of Michigan *Monitoring the Future* study of cohorts of graduates conducted for the *National Institute on Drug Abuse* (NIDA).

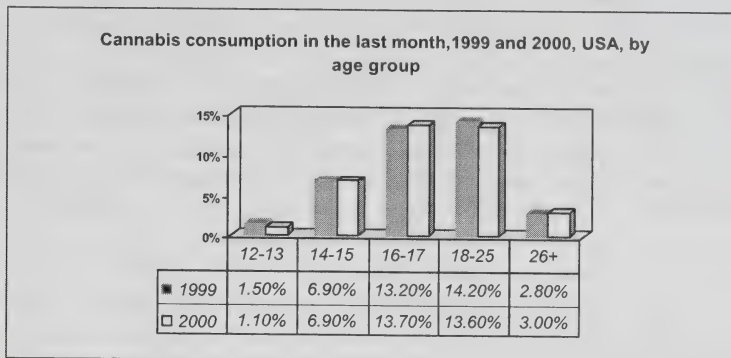


The 2000 general population survey¹⁶ shows that 6.3% of Americans 12 years and over used illegal drugs during the past month, and 4.8% (4.7% in 1999) consumed cannabis. Overall, 14 million Americans are considered *current users* of illegal drugs, i.e., consumers in the past month. Among this group of users, 76% are consumers of marijuana and 59% of marijuana only.

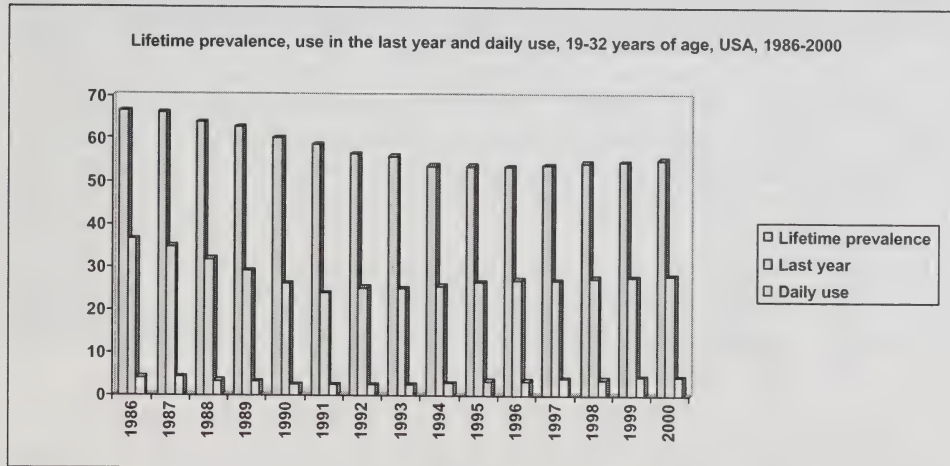
The estimated number of new users in 1999 was 2 million, compared to 2.6 million in 1996 and 1.4 million in 1990. Two thirds of the new consumers were between 12 and 17 years of age, the others in the 18-25 age group. Average age at the first experiment with cannabis was 17 in 1999, compared to about 19-20 at the end of the 1960s.

¹⁶ Substance Abuse and Mental Health Services Administration (2001) *Summary of findings from the 2000 national household survey on drug abuse*. Washington, DC: Department of Health and Social Services

Frequency of consumption among current users increased between 1999 and 2000: in 1999, 31.6% consumed cannabis 100 days or more during the preceding year, compared to 34.7% in 2000. Finally, the distribution by age group follows the expected trends, as shown in the following chart.



The *Monitoring the Future* 2000¹⁷ survey gives use patterns beginning in 1986 for cohorts of young graduates between 19 and 32 years of age. The following figure summarizes the data.



¹⁷ Johnston, L.D., et al., (2001) *Monitoring the future. National Survey Results of Drug Use, 1975-2000. Volume II College Students and Young Adults Ages 19-40*. Bethesda, Michigan: NIDA.

In 2000, lifetime prevalence in the 31-32 age group was 73% for all illegal drugs, 68% for marijuana.

United Kingdom

In the United Kingdom, the *British Crime Survey*¹⁸ has measured illegal drug use patterns every two years since the early 1980s. Since establishment of the EMCDDA, *Drugscope*,¹⁹ the United Kingdom correspondent, annually reports use patterns and related indicators.

The percentage of respondents between the ages of 16 and 59 who consumed an illegal drug during the last year in the United Kingdom rose from 9.9% in 1994 to 10.7% in 2000. The figures for cannabis are 8.4% and 9.4% respectively. Lifetime prevalence of cannabis use in the 16-29 age group climbed from 34% in 1994 to 44% in 2000. As a function of age, the use patterns over the last year are as follows:

- 16-19 years of age: from 29% in 1994 to 25% in 2000;
- 20-24 years of age: from 23% in 1994 to 27% in 2000;
- 25-29 years of age: from 12% in 1994 to 17% in 2000.

In all instances, consumption by men is greater than consumption by women.

The report notes that the most significant change is in consumption of cocaine by young men in the 16-29 age group (up from 1.2% to 4.9%).

France

The work of the *Observatoire français des drogues et de toxicomanies* (OFDT) [French monitoring centre for drugs and drug addiction] has greatly improved monitoring and understanding of trends in France. The OFDT publishes a bi-annual report on use patterns and related indicators (e.g., seizures, enquiries, applications for treatment) and a series of studies and technical reports on specific issues. In its 2002 report, the OFDT²⁰ gives the following figures on cannabis consumption:

- Lifetime prevalence: 21.6% of adult population (18-75)
- Occasional use (at least once in the past year): 6.5%
- Repeated use (at least ten times within the past year): 3.6%
- Regular use (ten times per month and over): 1.4 %

¹⁸ The 1998 and 2000 reports are available on-line at the Home Office website:
<http://www.homeoffice.gov.uk/rds/pdfs/hors224.pdf>

¹⁹ The 2000 report is available on-line at the following website:
<http://www.drugscope.org.uk/wip/11/3/pdf/UK%20DRUG%20SITUATION%202001.pdf>

²⁰ Observatoire français des drogues et de toxicomanies (2002) *Drugs and Drug Addiction: Indicators and Trends 2000*. Paris: author, pages 98-99.

More than twice as many men as women experiment with marijuana; in the 18-34 age group, 40.5% of men have tried it. The proportion of experimenters drops with age. Repeated consumption is reported by 14.6% in the 18-25 age group, compared to 1.6% in the 26 and over age group. The OFDT reports that the percentage of the adult population (18-34 age group) who have experimented with cannabis continues to rise due to increased “trivialization” of cannabis. Among adolescents, consumption has risen significantly. In 1993, 34% of boys and 17% of girls reported having consumed cannabis by the age of 18, compared to 59% and 43% respectively in 1999. The OFDT report goes on to say that experimentation with cannabis has become standard behaviour for young people in late adolescence.

Interestingly enough, the OFDT report allows for construction of a user typology and, without too great a stretch, identification of the warning signs of possible at-risk behaviour.

The following table shows frequency of consumption among young people in late adolescence.²¹ In addition to the differences according to sex found in other epidemiological surveys, this table shows that fewer than one quarter of 17 year-old boys report occasional use, compared to one third of 19 year-olds. At the same time, the figure for boys, between the ages of 17 and 19, who abstain drops by 10 points.

Frequency of cannabis consumption by young people in late adolescence in 2000, by age, sex and type of consumption

Type of consumption	Definition	Girls, 17 yrs	Boys, 17 yrs	Boys, 18 yrs	Boys, 19 yrs
Abstinence	Never	59.2	49.9	45.1	39.8
Experimental	Past consumption, but not in the last year	5.0	5.4	6.5	8.2
Occasional	Between 1 and 9 times a year	23.3	20.9	19.9	19.4
Repeated	More than 9 times a year, less than 10 times a month	7.4	9.3	9.9	10.1
Regular	Between 10 and 19 times a month	2.6	6.4	6.2	6.8
Intensive	20 times or more a month	2.	8.0	12.4	15.8

The other interesting breakdown in the OFDT study—one that points to potential problems (and could be useful for preventive purposes) even though the report makes it clear that no equivalence was made between these profiles and risk—concerns circumstances of use. A separate category is created for those who smoke alone or in

²¹ *Ibid.*, page 100.

the morning or at noon. A near-perfect linear relationship can be seen between type and circumstances of use, as shown in the table below.²²

Frequency of cannabis use, in the morning or alone, by young people in late adolescence, in 2000, by type of consumption

Type of use	Morning or noon			Alone		
	Never	Occasionally	Often	Never	Occasionally	Often
Occasional	57.2	40.4	2.4	81.9	16.2	1.9
Repeated	17.9	69.8	12.3	46.4	46.6	7.0
Regular	4.7	58.9	36.4	19.9	60.2	19.8
Heavy	1.1	22.7	76.1	4.5	38.2	57.3

The situation was explained by Jean-Michel Coste, Director of the Monitoring Centre in his testimony to the Committee:

I think it is extremely important to answer the concerns of authorities when, in matters of prevention, those authorities are looking for something whose objective is not only to prevent first use, but also to prevent going from regular use to use that turns into a problem. From the investigation point of view, it is important to define this idea of problematic use and grade the users. It is possible to do this by trying to find occasional users, those who use repeatedly or regularly and those who constitute a problem.

Right now, we are trying to define three user criteria. We are trying to see if the young person uses cannabis on an intensive or daily basis, if he often uses alone or uses often in the morning. If we get a combining of those three criteria, I think we can define something covering the notion of problematic use of cannabis.²³

The Netherlands

The Netherlands is a country of particular interest because of the unique approach it adopted in 1976.²⁴ An epidemiological survey of use patterns of the general population was conducted in 1997; the results of a second (2001) survey are expected soon. For individuals between the ages of 15 and 64, the data show a lifetime prevalence of 19.1%, consumption in the preceding year of 5.5%, and consumption within the past month of 2.5%. First-time users in the preceding year account for 1% of the population, and average user age is 28. In the 15-34 age group, lifetime prevalence is 31.8% and use within the last year, 14.2%.

²² *Ibid.*, page 101.

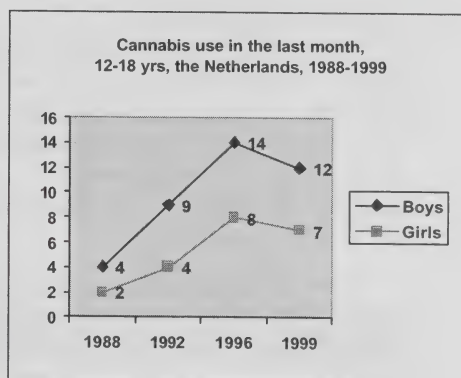
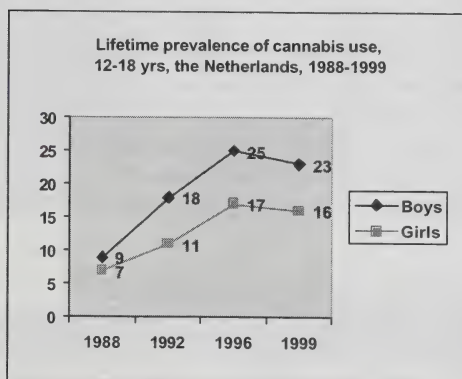
²³ Mr. Jean-Michel Coste, Director, *Observatoire français des drogues et des toxicomanies*, testimony given before the Special Senate Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, October 1, 2001, Issue 7, pages 31-32.

²⁴ Chapter 20 discusses public policy approaches in various countries in greater detail.

Among recent users (within the past month), frequency is distributed as follows:

- Consumption on 1 to 4 days during the course of the month – 45%
- Between 5 and 8 days – 14%
- Between 9 and 20 days – 15%
- Over 20 days – 26%

In addition, since 1984, the Netherlands has conducted surveys of students between the ages of 10 and 18. The data produced show a significant increase in lifetime use and current use (past month) as in the following charts (data for 12-18 age group only).²⁵



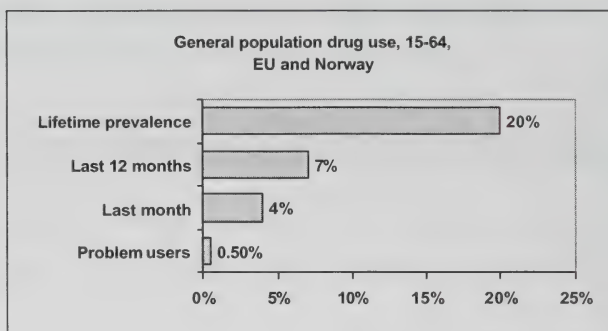
As in the other studies, more boys than girls are consumers and prevalence increases with age: in the 16-17 age group, lifetime prevalence for boys is 43%, for girls 31%, with current use figures 22% and 11% respectively.

Use patterns in Europe, ages 15-64

EMCDDA publications covering Europe and Norway reveal an interesting gradation in the nature of illegal drug use. Although the table shown here covers all illegal drugs, we know that cannabis is the drug of choice for at least 90% of users in all countries. The table is relevant here because we will be attempting to estimate proportions of users in Canada by cannabis use.

²⁵ Trimbo-Instituut (2000) *The Netherlands Drug Situation 2000*. Report to the EMCDDA. Available on line at: http://www.emcdda.org/multimedia/publications/national_reports/NRnetherlands_2000.PDF

In other words, of the approximately 50 million people who have experimented with an illegal drug at least once in their lifetime, approximately 17.5 million have used drugs in the preceding 12 months, 10 million, in the past month, and 0.5% are considered at-risk users.



International comparisons

In spite of significant differences in survey methods (type of questionnaire and form of entry), indicators, years and age range covered, the following tables provide valuable indications of prevalence in a group of countries.

The first table sets out information on year of survey, age of respondents, and proportions reporting prevalence of cannabis consumption in their lifetime and in the last year. For purposes of comparison, we have added the most recent Ontario data on the general population.

Lifetime prevalence and consumption in the last year, general population ²⁶

Country	Year	Form of entry	Sample	Age	Lifetime prevalence	Last year
Australia	1998	Mixed	10,000	14+	39%	18%
USA	1999	Mixed	66,706	12+	35%	9%
USA	2000	Mixed	71,764	12+	34%	8%
U.K.	2000	Mixed	13,021	16-60	27%	9%
Denmark	2000	In person	14,228	16-65	24%	4%
France	1999	Telephone	11,526	15-65	23%	8%
Belgium	1998-1999	Telephone	3,311	18-50	21%	?
Germany	2000	Mail	6,332	18-60	21%	6%
Ireland	1998	Mail	10,415	15-65	20%	9%
Spain	1999	In person	12,488	15-65	20%	7%
Netherlands	1997	In person	22,000	15-65	19%	6%
Switzerland	1997	Telephone	13,004	15-60	19%	5%
Greece	1998	In person	3,752	15-65	13%	4%
Sweden	2000	In person	2,000	15-65	13%	1%
Germany (East)	2000	Mail	1,430	18-60	11%	5%
Finland	1998	Mail	2,568	15-70	10%	3%
Ontario	2000	Telephone	2,406	18 +	35%	10.8%

²⁶ Table adapted from Rigter, H. and M. von Laar (2002) "The Epidemiology of cannabis use." in Pelc, I. (ed.), *International Scientific Conference on Cannabis*. Brussels.

Lifetime consumption prevalence is 10% in Finland compared to 39% in Australia; consumption in the preceding year in Sweden is only 1%, in Australia, it is 18%. The Ontario figures of 35% and 11% respectively are among the highest cannabis consumption figures reported.

The second table is specifically about young people.

Prevalence of consumption by young people, 15-16 years old, 1995 and 1999²⁷

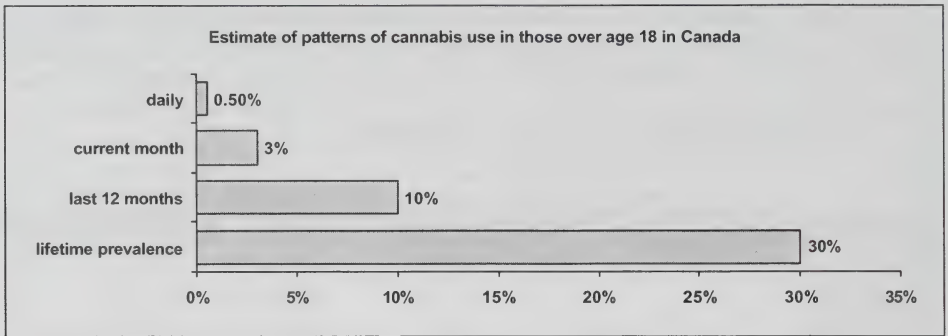
Country	Lifetime prevalence		Last month		> 6 times in the last month	
	1995	1999	1995	1999	1995	1999
USA	34%	41%	16%	19%	7%	9%
Russia	41%	35%	24%	16%	9%	6%
France	-	35%	-	22%	-	9%
Ireland	37%	32%	19%	15%	7%	5%
Netherlands	29%	28%	15%	14%	6%	5%
Italy	19%	25%	13%	14%	5%	4%
Denmark	17%	24%	6%	8%	1%	1%
Norway	6%	12%	3%	4%	1%	1%
Finland	5%	10%	1%	2%	0%	1%
Greece	2%	9%	1%	4%	0%	2%
Portugal	7%	8%	4%	5%	1%	2%
Sweden	6%	8%	1%	2%	0%	0%

We lack readily-comparable data for Canada. Returning to the Ontario data, we see that, in 1995, 40.7% of Grade 10 students had consumed cannabis at least once in the preceding year; the figure for 2001 is 45%. Similarly, in 1995, 19% of all high school students consumed cannabis more than six times monthly; the figure for 2001 is 25%. This means that, consumption levels in Canada appear to be among the highest in the world for this age group.

To summarize

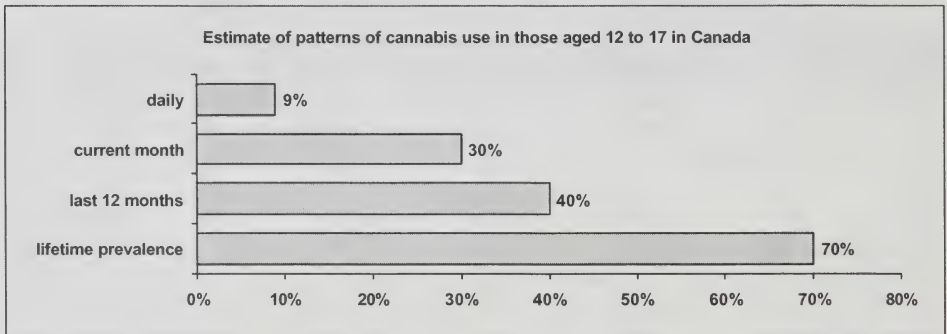
In the absence of recent reliable data on a national scale, we can only hypothesize. For the population over age 16, there is reason to believe that cannabis use is as follows:

²⁷ Table adapted from Rigter and von Laar, *op. cit.*, page 20.



Based on the last census, there are approximately 20 million Canadians between the ages of 18 and 64. If we accept the values used in this graph, there are then approximately 2 million Canadians over age 18 who have used cannabis during the preceding 12 months, approximately 600,000 who have used it during the past month, and approximately 100,000 who use it daily.

In young people aged 12 to 17, the situation could be as follows:



According to the latest census, there are approximately 2.5 millions young persons aged 12 – 17 in Canada. If 40% have used cannabis in the preceding year and 30% in the past month, this means 1 million and 750,000 young users in each category respectively. Approximately 225,000 would make daily use of cannabis.

Overall, these epidemiological trends indicate a number of things. At the simplest level, they clearly show division by generation and gender: people under the age of 35 consume more than those over 35; and men are more frequent consumers than

women. Furthermore, users are more likely to be single. The data appear constant both over time and among countries.

At the same time, there have been changes to the user profile. Rates for the 30-49 age group have tended to increase, supporting to some extent the hypothesis that these are the first cohorts of '70s users. Although the tendency in the '60s was to identify users as working-class or unemployed, there has been an increase in employed individuals with post-secondary or university education.

Some authors link usage to living in an urban area—for example, in the Netherlands, use is far more widespread in metropolitan than in rural areas. This factor does not apply in Canada. In Ontario for example, students outside Toronto consume more cannabis than do those in Metro Toronto. Cannabis use is also related to non-practice of religion, families in which at least one parent has a post-secondary education, and single parent families.²⁸

According to the Ontario studies, age of initial use seems to be lower than it was in the 1970s (close to 16 years of age); it now stands at between 13 and 15 years of age (a mean of approximately 14). On the other hand, as we have said, early initial experience is down (currently 2% compared to 8% in the early 1980s). If age of first experience appears related to regular consumption in late adolescence and early adulthood (18-25 years) as suggested by the American studies, it is clear that consumption is inversely proportional to age and the rate of cessation is high. For those who continue to consume in the long term, the age of cessation is delayed until the late 30s.

On a more complex level, these trends would lend support the OFDT hypothesis concerning “trivialization” of cannabis consumption. The following section shows that a number of researchers—including persons who have testified before the Committee—impute this “trivialization” to a reduction in the perception of cannabis-related risks (health and legal consequences) and greater availability. Aside from “trivialization”, there is also an acculturation aspect, the idea that cannabis will eventually be considered a psychoactive substance akin to alcohol or tobacco, whose risks we learn to recognize and manage.

Furthermore, cannabis consumption rates vary widely from one country to another with no apparent relation to public policy. This is one of the strong hypotheses that we will revisit in greater detail in our Chapter 21 examination of public policy.

²⁸ See for example Rieger, H. and M von Laar (2002) “Epidemiological aspects of cannabis use.” in Pelc, I. (ed.) *International Scientific Conference on Cannabis*. Brussels.

PATTERNS AND CIRCUMSTANCES OF USE

Why do people use cannabis? In fact, why have people felt the desire or the need to use all manner of psychoactive substances since time immemorial? We suspect that these questions are highly charged with symbolic and political meaning: when it is a question of cannabis, sometimes the focus is on its “soft drug” nature, its festive and sociable side, and sometimes the focus is more on its role as part of a marginal, if not pre-delinquent, trajectory and the risks associated with moving on to other drugs. When it comes right down to it, and rather surprisingly, we know very little about users’ motivations and experiences.

We can distinguish two large groups of studies: socio-anthropological studies that try to identify users’ practices and certain environmental factors that put these practices in context, and psychological studies that try to relate personality and family-related factors to cannabis use. Although both types of studies are just as relevant to understanding the nature of the phenomenon, their approaches and their results are often difficult to reconcile. But, first, a few historical notes on the uses of cannabis.

*Cannabis in history*²⁹

Although the historical routes of cannabis still remain obscure, archaeologists discovered a Chinese village where they uncovered the oldest use of the cannabis plant, dating back approximately 10,000 years. It was primarily used for clothing, ropes and fishing nets, paper and other decorative purposes. It was also considered one of China’s five cereals. Around 2000 B.C. the Chinese became aware of the psychotropic and medicinal properties of cannabis oil (resin) and used it in particular for the treatment of menstrual fatigue, gout, rheumatism, malaria, constipation and absentmindedness, and as an anaesthetic. Religious uses were also identified, and the Chinese noted that its use allowed communication with spirits and lightened the body. In the first century B.C., Taoists used cannabis seeds in their incense burners to induce hallucinations that they considered a way to achieve immortality.

Several historians attribute the origins of cannabis to the Scythians around Siberia and North Central Asia towards the 7th century B.C. According to Herodotus, a Greek historian who lived in the 5th century B.C. marijuana was an integral part of the cult of the dead that the Scythians followed to honour the memory and spirit of their departed leaders. Indications of cannabis use, often for religious purposes, have also been found with the Sumerians and, according to some, in certain passages of the Bible.

²⁹ This section is based extensively on Spicer, L. (2002) *Historical and Cultural Uses of Cannabis and the Canadian “Marijuana Class”*, Ottawa: Library of Parliament, report commissioned by the Committee from the Library of Parliament.

The first ethnographic description of ancient people inhaling marijuana as a psychotropic stimulant was confirmed by a Russian anthropologist, Rudenko, in 1929. Not only did he find the embalmed body of a man and a bronze cauldron filled with burnt marijuana seeds, but he also found shirts woven from hemp fibre and metal censers designed for inhaling marijuana smoke. Apparently this activity was not religious in nature but was a daily activity in which both men and women participated, as confirmed by the discovery of the frozen body of a 2,000-year-old woman in the same cemetery where Rudenko made his first discovery. Archaeologists found some of her possessions, including a small container of cannabis that would have been smoked for pleasure and used in pagan rituals, buried in a hollow tree trunk.

In India, cannabis has been closely associated with magical, medical, religious and social customs for thousands of years. According to legend found in the Vedas, Siva is described as “The Lord of Bhang”, a drink made of cannabis leaves, milk, sugar and spices. This drink is still part of the traditions of certain castes. Cannabis is also renowned for its use in Tantric sexual practices. Approximately one hour before the yoga ritual, the devotee drinks a bowl of bhang after reciting a mantra to the goddess Kali. Similarly, “charas” holds a special place in the prayer ceremony called Puja. Lastly, cannabis was used for medical purposes.

Although not indigenous to Africa, the cannabis plant is part of religious, medical and cultural traditions across almost the entire continent. In Egypt, it has been grown for over a 1,000 years, while the first evidence of its presence in central and southern Africa dates back to 14th century Ethiopia where ceramic smoking-pipes containing traces of cannabis were discovered. In North Africa, cannabis influenced music, literature and even certain aspects of architecture since in some homes, a room was set aside for kif where family members gathered to sing, dance and tell stories. The plant was also used as a remedy for snake bite (Hottentots), to facilitate childbirth (Sotho) and as a remedy for anthrax, malaria, blackwater fever and blood poisoning (former Rhodesia).

In South America, it would have been primarily slaves imported from Africa who brought cannabis. East Indian labourers brought cannabis to the Antilles, and Jamaica in particular, where it is not only used recreationally but is integrated in many aspects of Jamaican, and particularly Rastafarian, culture.

As for North America, it is not known exactly when the psychotropic properties of cannabis were discovered. Some think that it played a role in several native cultures; others doubt that it ever played a significant role. The oldest evidence of the existence of cannabis in North America dates back to Louis Hébert, Champlain’s apothecary, who introduced cannabis to white settlers in 1606, essentially as a fibre to be used to make clothing, cordage, sails and rigging for ships. However its psychotropic properties were not discovered until the 19th century. Between 1840 and 1900, it was used in medicinal practice across almost all of North America. It was prescribed for various conditions such as rabies, rheumatism, epilepsy and tetanus, and as a muscle relaxant.

Moreover, its use became so widespread that cannabis preparations were sold freely in drug stores.

The first study of cannabis was conducted in 1860 by the *American Governmental Commission*. When presenting the findings of the Commission to the *Ohio State Medical Society*, Dr. Meens said:

*Cannabis effects are less intense than opium, and the secretions are not so much suppressed by it. Digestion is not disturbed; the appetite rather increases; the whole effect of hemp being less violent, and producing a more natural sleep, without interfering with the actions of the internal organs, it is certainly often preferable to opium, although it is not equal to that drug in strength and reliability.*³⁰

At the same time, other doctors criticized its use because of the variability and uncertainty of its effects. As for its recreational uses, they seem to have been noted for the first time at the beginning of the 20th century and quickly became the subject of social concern, especially because of the association of cannabis with Mexican and then black American workers, strengthening fears about its criminogenic and aphrodisiac effects. In 1915, California became the first state to prohibit possession of cannabis. Canada followed suit in 1923, while the United States outlawed possession in 1937. However, in 1944, the La Guardia report, from the State of New York, emphasized the harmless effects of cannabis. It was followed by reports from the Le Dain Commission in Canada and the Schafer Commission in the United States at the beginning of the 1970s. On the international scene, cannabis was prohibited by the Single Convention of 1961 (which will be discussed more fully in Chapter 19).

In Canada, mass use of cannabis came with the 1960s. Prior to that, the phenomenon was almost invisible and there were only 25 convictions for cannabis possession between 1930 and 1946. In 1962, the RCMP reported 20 cannabis-related cases. Then came the explosion: 2,300 cases in 1968 and 12,000 cannabis convictions in 1972. According to the Le Dain Commission, the sudden growth in cannabis use could be attributed to the hippies, the Vietnam War, underground newspapers and the influence of the mass medias. On top of these major counterculture movements, Canada became more open to the world: more and more young Canadians were travelling and Canada itself received more and more visitors and immigrants. Since then, except for a few years, cannabis use for non-medicinal purposes has increased as we saw in the previous section.

Trajectories of use

Most studies identify quantity and frequency of use. Thus as we saw in the previous section, the OFDT report, for example, identifies experimentation, occasional, repeated, regular and heavy use, with frequency of use (number of times a month) and circumstances (alone or in a group, morning or evening) as the preferred indicators of

³⁰ Quoted in Spicer, *op. cit.*, page 29.

at-risk use. However, this knowledge of certain characteristics of use by young people in particular tells us very little about what will follow. If we could stop time at a given moment in a user's history, the knowledge would not help us determine what would happen next. For example, with this knowledge we could not answer the question of whether or not cannabis use begun during adolescence is part of a trajectory leading to increased use. Now, a certain number of those who testified before the Committee told us that they had observed dependence in cannabis users. Also, certain government documents, in the US in particular, do not hesitate to point in this direction by measuring requests for treatment and by reporting that requests for treatment of cannabis dependence are on the rise. For example, documents given to us by American drug authorities indicate that 40% of people who meet the DSM IV diagnostic criteria for dependence (which will be dealt with in the following chapter) have a primary diagnosis of cannabis dependence.³¹ Unless we believe that a few occasional uses lead to dependence, we must accept that a relatively significant number of young people who try cannabis during adolescence will embark on a trajectory of use that will lead to dependence.

But what is the situation exactly? What are these trajectories of use? What are the stages? Is there a progression?

First of all, like Professor Mercier, we must point out that the idea of a trajectory is itself slightly inaccurate.

The concept of trajectory is based first of all on the basic principle whereby individuals will go through a number of stages or successive phases. It is true that the concept of trajectory is somewhat incorrect. A trajectory is somewhat of a metaphor for the trajectory of the planets and the stars, that is something very focused and in continuous motion. The word "journey" ("trajet") would be more accurate. A journey includes detours, round trips, et cetera. So we must bear in mind that this concept of trajectory is not necessarily linear, but that there will be different situations and different paths. The word "journey" is a more accurate way of describing the relationship an individual will have with psychotropic substances during his or her life. There is another important concept as well. In addition to trajectories, phases and stages, there are also transitions and passages, when individuals move from one stage to another.³²

Some, like the INSERM report, speak of contact, experimentation and commitment phases. Contact is seeing cannabis or knowing people who use it. Experimentation, of course, is trying it, and may be limited to a single time. Lastly, commitment refers to the various ways of managing use, from relative commitment where there are significant changes in use to true commitment where there are fewer changes. The report specifies that these three stages are not in all trajectories and do not always follow one another in a coherent fashion. Furthermore, there will often be

³¹ Office of National Drug Control Policy (2002) *National Drug Control Strategy*. Washington, DC: The White House.

³² Professor Céline Mercier, testimony before the Special Senate Committee on Illegal Drugs, Canadian Senate, first session of the thirty-seventh Parliament, December 10, 2001, Issue No. 12, Page 6.

periods of cessation, followed by resumption or a definitive cessation. Nevertheless, according to INSERM, *“commitment probably constitutes the most important stage if we want to understand what cannabis use corresponds to. However, the data on this commitment phase seems the most inconsistent as most works deal with initiation.”*³³ [translation]

In fact, the data on committed use is still very sketchy, such that beyond a few generalities, we really know very little about the circumstances and trajectories of cannabis use. It is as if we were first worried about classifying users according to their risk of becoming dependent, or were trying to make them fit into a ready-made model. While testifying before the committee, Professor Mercier recalled the five stages in the classic pattern of addiction: initiation, gradual start of abuse, dependency, treatment and reintegration. However, as she pointed out, this is only one of the possible trajectories, the one that has been studied most frequently with regard to drugs (alcohol, heroin and cocaine in particular), and yet it hardly applies to cannabis. In any event, it is clear that with cannabis users, there is great variability in use.

The epidemiological data presented in the previous section indicate fairly clearly that cannabis use decreases significantly with age. More specifically, the rate of cessation is significant, as the following table shows.

Rate of Cessation (percentage of lifetime users who did not use cannabis in the previous year), USA, 1996 ³⁴

Age Group	Women	Men
12-17	26%	20%
18-25	54%	39%
26-34	82%	74%
35 +	91%	82%

Consequently, the rate of continuation is relatively low. It was 24% in the US in 2000, 17% in Denmark, 29% in France and Germany (West), 24% in Switzerland and 8% in Sweden. The only exception is Australia with a rate of continuation of 46%.

That being said, these data says nothing about the period during which cannabis use is continued, the frequency of use or the quantities used. Epidemiological studies tend to establish that most users stop consumption during their thirties, but only ethnographic studies can provide more information. Unfortunately they are few.

The INSERM report describes studies conducted in Australia, France and the United States. Most show progress towards regulated cannabis use, that is, use both

³³ INSERM (2001), *op. cit.*, page 28.

³⁴ Rigter, H. and M. von Laar, *op. cit.*, page 27.

stabilized—fewer variations in use—and use more integrated into social living conditions, that is, more integrated into personal and professional life. A significant proportion of long-term regular users are men, and are more likely to be single and have creative occupations. Most say they use cannabis to relax and relieve stress, to help them sleep, or to alter their state of consciousness.³⁵

In Canada, Hathaway studied regular users³⁶, using open-ended interviews from October 1994 to June 1995. The study involved a sample of 30 regular users (15 men and 15 women), aged 22 to 47 (average age 32). Participants had used cannabis for 3 to 31 years with the average being 17 years; 40% had used it daily for 20 years or more. This data is in complete agreement with what INSERM suggested. Long-term users integrate their regular cannabis use into their daily lives and social activities while remaining aware of the symbolic value of this “tolerable deviance”. While most started after coming into contact with a small group of users who served as more or less long-term support, the users who were most at peace with their drug use were those who regulated their use independently.

*In this study, I found that moving from a pattern of use that is dependent on one's level of participation with other users to one that is independently regulated marks a crucial transition in the marijuana user's relationship to the drug. (...) their continuing use of the drug does not necessarily suggest an inability to commit to conventional adult roles. Instead, adapting one's marijuana use to suit an otherwise conventional way of life appears to make the practice significant on a more personal level than that previously fostered through affiliation with marijuana-using groups.*³⁷

For a certain number of users, this acculturation of the drug occurs after a more or less prolonged period of abstinence during which they distance themselves from the group of users. This makes it possible for them to determine for themselves the role cannabis will play in their lives. Moreover, every participant in the study had managed to integrate their use into their personal or professional life. Users associate their drug use primarily with free time and relaxation after a day at work; some even compare its role with that played by alcohol. Although 97% used cannabis at least weekly and 37% used it daily, only 7% (2 people) defined their use as problematic. Most went through periods of abstinence or of decreased use without experiencing difficulties.

Another study, reported by Rígter and von Laar,³⁸ was conducted in the State of New York on a cohort of users who were followed for a period of twenty years. This study identified four types of users:

³⁵ INSERM (2001), *op. cit.*, pages 55-58.

³⁶ Hathaway A. D. (1997a) “Marijuana and lifestyle: exploring tolerable deviance.” *Deviant Behaviour: An Interdisciplinary Journal*, 18, pages 213-232; and (1997b) “Marijuana and tolerance: revisiting Becker's sources of control.” *ibid*, pages 103-124.

³⁷ Hathaway, A.D. (1997a), *op. cit.*, page 219.

³⁸ Rígter, H. and M. von Laar, *op. cit.*, pages 28-29.

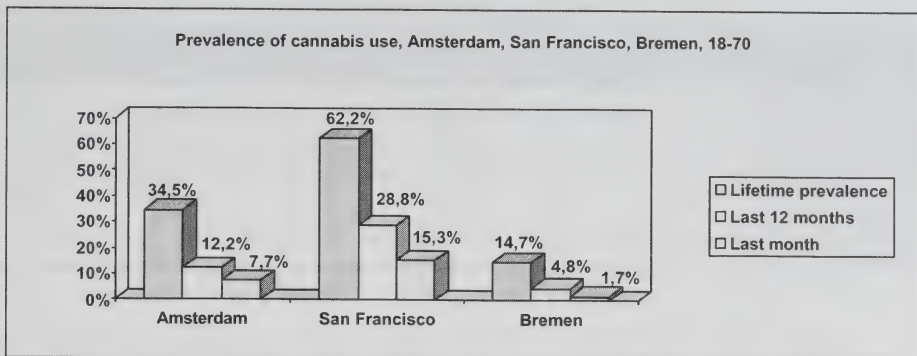
- Early-onset heavy-use: start around age 15 and become regular users around age 17.5; daily use for a duration of 131 months on average; 49% still use around age 34-35;
- Early-onset light-use: start around age 15 but fewer (44%) go on to daily use (for an average duration of 28 months); only 10% still use at age 34-35;
- Mid-onset heavy-use: start around age 16; two-thirds become daily users (average duration 42 months) and still use at age 34-35;
- Late-onset light-use: start at age 19.5 and a minority become daily users (21%). Almost all discontinue use around age 34-35.

In all, this study shows that there were clearly more light users than heavy users. The latter had less education, went to church less often, were more likely to have a history of delinquency, and changed jobs more often. Early-onset users showed a greater tendency towards episodes of delinquency and mental disorders, started to drink and smoke tobacco sooner, had a greater tendency to experiment with other drugs, and tended to identify positive reasons for using marijuana.

But it is risky to propose typologies, because boundaries are fluid and users switch from one type of use to another fairly easily. This was shown in particular by the comparative study conducted by Cohen and Kaal in Amsterdam, San Francisco and Bremen.³⁹

The study involved a sample of experienced users consisting of 216 people in Amsterdam, 265 in San Francisco and 55 in Bremen. The sophisticated method of selecting candidates from epidemiological studies conducted in the general population of these cities is important because it reveals the prevalence of use. The following chart shows this data.

³⁹ Cohen, P.D.A. and H.L. Kaal, *The irrelevance of drug policy. Patterns and careers of experienced cannabis use in the population of Amsterdam, San Francisco and Bremen*. Amsterdam: University of Amsterdam, CEDRO.



The average age of participants varied between 33 and 37; most had a spouse and a stable job. The average age for initiation into cannabis use in the three cities was 16, that is, at a younger age than people who had only occasional exposure to cannabis (21.2 in Amsterdam and 19.5 in Bremen). Most were introduced by friends and their first experience was as part of a group. At age 19, they were regular users (at least once a month) and their heaviest use was around age 21.5. Trajectories of use were determined using six patterns:

- 1) More to less: after an initial period of heavy use, the individual gradually decreased his use
- 2) Gradually more: the individual gradually increased his use
- 3) Stable: amount and frequency did not change
- 4) Up-top-down: use increased, reached a peak, and then decreased
- 5) Intermittent: frequent discontinuation after initiation
- 6) Varying: use rises and falls

As the following table shows, no less than 75% of respondents in the three cities correspond to patterns 4 (48.7%) and 6 (25%).

Patterns of Use in Regular Users ⁴⁰

	Amsterdam		San Francisco		Bremen	
	Number	%	Number	%	Number	%
Pattern 1	17	8	18	7		
Pattern 2	13	6	17	6	6	11
Pattern 3	24	11	5	2	5	9
Pattern 4	104	48	133	50	24	44
Pattern 5	7	3	25	9	2	4
Pattern 6	51	24	66	25	18	33

During their period of heaviest use, approximately 45% of those studied used cannabis regularly. However, during the preceding year, approximately 35% used it less than once a week and more than 35% did not use it at all. During the past three months, more than 50% did not use cannabis at all, and less than 10% used it on a daily basis. As for amounts, the authors of the study concluded that they are low. During their period of heavy use, less than 18% of those studied smoked more than one ounce per month, whereas during the preceding year, approximately 60% had smoked less than 4 grams (1/7 of an ounce) per month. Users were divided fairly equally between those who preferred medium or mild cannabis and those who preferred a stronger variety (with a more marked preference for the mild varieties in Amsterdam). Users have a certain number of rules regarding use: no smoking at work or school (more than 35%), during the day, or in the morning.

Most long-term users had had periods of abstinence that varied from one month to a year or longer, most often because they no longer felt the need or the desire to smoke. Moreover, between one-third and one-half had decided to decrease their use at various times.

Thus we can see that trajectories of use do not follow a linear progression, and are marked by key periods when the user integrates cannabis use into his social and personal life, distances himself from groups of users, stabilizes the role marijuana plays in his personal life, with periods of heavy use, especially at the beginning of the trajectory, followed by periods of either decreased use or of ups and downs in terms of frequency and amount.

Factors related to use

Following logically from what we saw in the previous section, studies on factors that could explain the use of drugs, and cannabis in particular, deal primarily with initiation or experimentation.

The INSERM report examines a set of studies on factors that could explain cannabis use: the influence of the family environment (use by parents, socialization,

⁴⁰ *Ibid.*, page 48.

parental teaching methods, quality of the parent-child relationship, parental models), peers (symbolic values of use, norms) and educational and social environments.⁴¹ There is no clear conclusion, but the report notes that the studies manage either poorly or not at all to take into account the user's role in social situations and consequently the incremental impact on use arising from the variability of social stresses as well as the methods of integration. We would also add that these studies do not reflect trajectories of use.

First of all, along with *DrugScope*, we note that the epidemiological approach to analysis of drug use, cannabis in particular, is based on a medical model of analysis of the prevalence of disease, whereas the reasons (which are not necessarily the causes) for drug use can very easily lie outside the medical field and, in a broader sense, outside the psychosocial model. Attributing dependence – understood here in terms of a disease – to factors pertaining to the relationship between the locus of control and the environment has consequences for the understanding of the phenomenon as well as for public policy. The report by this British body contains a table of the explanations of drug use we feel it useful to reprint here.

Attribution Explanations of Drug Use⁴²

Attribution	Common Sense Meaning	Resulting Public Policy
Internal x stable	Drug use is a disease (dependence model)	Treatment model
Internal x unstable	Drug use is the periodic seeking of pleasure	Reduced demand model (replace drugs with something else)
External x stable	Shortcomings in the environment explain drug use	Change the environment
External x unstable	Availability of drugs explains their use	Reduced supply model

In fact, we must not forget that, with regard to psychoactive substances, the medical model of disease is still a dominant model for comprehension and forms the other part of the public response along with the penal model.⁴³ As we were told several times, drugs, and cannabis in particular, are not dangerous because they are illegal, they are illegal because they are dangerous. We will have occasion to comment on this statement in greater detail in the following chapters.

⁴¹ INSERM (2001) *op. cit.*, pages 28-50.

⁴² DrugScope (2001) *United Kingdom. Drug Situation 2000*. Report to the EMCDDA, page: 19.

⁴³ On this subject, see for example the work of Bergeron, H. (1996) *Soigner la toxicomanie. Les dispositifs de soin entre idéologie et action*. Paris: L'Harmattan; and Barré, M.D., M.L. Pottier et S. Delaître (2001) *Toxicomanie, police, justice: trajectoires pénales*. Paris: OFDT.

For now it is enough to remember that attempts to explain drug use most often involve looking for defects in personality or the environment rather than trying to understand the choices made by users.

Among the factors related to the locus of control, studies identify primarily:

- Peer influences: the first uses depend on the influence of other young people in the group;
- Family influences: a family environment where parental supervision is lacking, where drug use is tolerated, where siblings or parents have criminal backgrounds, and where parents themselves are users;

Among the factors related to the environment, studies mention:

- The availability and accessibility of drugs: the more drugs are available, the greater their use will be;
- Social tolerance: the more drug use is accepted, the higher levels of use will be;
- Perception of risk: the less the risk of social disapproval or the perceived risk to health, or the risk of legal action, the greater the use there will be.

According to the report *Monitoring the Future*, there is no doubt that young people's perceptions of drugs and their attitudes towards them determine the levels of use, which in return must determine public policy:

*Early in the decade of the 1990s we noted an increase in the use of a number of illicit drugs among secondary students and some important changes among the students in terms of certain key attitudes and beliefs related to drug use. (...) Specifically, the proportions seeing great risk in using drugs began to decline, as did the proportions saying they disapproved of use. As we predicted, those reversals indeed presaged "an end to the improvements in the drug situation that the nation may be taking for granted." The use of illicit drugs rose sharply in all three grade levels after 1992, as negative attitudes and beliefs about drugs continued to erode. This pattern continued for some years.*⁴⁴

And further on:

We can summarize the findings on trends as follows: over more than a decade – from late 1970s to the early 1990s – there were very appreciable declines in use of several illicit drugs among twelfth-grade students, and even larger declines in their use among college students and young adults. These substantial improvements – which seem largely explainable in terms of changes in attitudes about drug use, beliefs about the risks of drug use, and peer norms against drug use – have some extremely important policy implications. One is that these various substance-using behaviours among American young people are malleable – they can be changed. It has been done before. The second is that demand-side factors appear to have been pivotal in bringing about those changes. The reported levels of availability of marijuana, as reported by high school seniors, has held fairly steady throughout the life of the study. (Moreover, both

⁴⁴ Johnston, L.D., et al., (2001) *op. cit.*, page: 6.

abstainers and quitters rank availability and price very low on their list of reasons for not using.). And in fact the perceived availability of cocaine actually was rising during the beginning of the sharp decline in cocaine and crack use, which occurred when the risks associated with that drug suddenly rose sharply. (...) Over the years, this study has demonstrated that changes in perceived risk and disapproval have been important causes of change in the use of several drugs. These beliefs and attitudes surely are influenced by the amount and nature of public attention paid to the drug issue in the historical period during which young people are growing up. A substantial decline in attention to this issue in the early 1990s very likely helps to explain why the increases in perceived risk and disapproval among students ceased and began to backslide.⁴⁵

In other words, social disapproval – through government information campaigns, for example – can generate attitudes that reject drug use and will be reinforced by actions likely to increase the risks associated with use (the risk of arrest, for example).

A study conducted in Newfoundland and Labrador involving a sample of 3,293 people is an example of this approach applied in Canada.⁴⁶ The questionnaire included questions about activities (family activities, housework, extracurricular activities, school work, sports, work, religious life), the availability of cannabis, use by parents, peers and the individual, parental and peer norms regarding cannabis, personal preferences and norms regarding cannabis. Analysis of variance dealt with the interaction of these various variables to explain personal use of cannabis. Overall, the model explains only 57% of use in the provincial sample, 65% for boys and 54% for girls. The results show that peer use is the main factor related to personal use (29% of variance), followed by personal preferences (themselves influenced by peer norms), personal norms and having to do chores around the home. Availability is not directly related to use and works through peer norms and use. Parental use is strongly linked to perceived availability. The authors conclude that this model has clear implications for interventions to prevent cannabis use:

In the province wide sample, Peer Use, Peer Norms, Availability, Own Preferences and Own Norms together account for 56% of the 57% of Own Use predicted by the model. Peer Norms and Availability work through Peer Use, so important targets for intervention should be Own Norms, Own Preferences and Peer Use. Of these variables, Own Preferences and Peer Use contribute the most to prediction of Own Use, together accounting for 48.8% of the variance. It is of interest that a large part of availability is predicted by Parental Use, suggesting Peer Use arises from possible supplies of the marijuana/ hashish from parental sources. This ought to be a target for intervention strategies as well. The model suggests sources of influence on target variables that ought to be considered in any intervention strategies.⁴⁷

Taking into consideration the limits of the model as well as the differentiation between the sexes and provincial health districts with respect to the relative weight of

⁴⁵ *Ibid.*, page 30.

⁴⁶ Wasmeier, M., et al., (2000) *Path analysis survey of substance use among Newfoundland and Labrador Adolescents. Marijuana/ hashish and Solvent use*. Memorial University of Newfoundland.

⁴⁷ *Ibid.*, page 15.

the independent variables, we have to wonder if this type of analysis is a true reflection of use, including initial use. Furthermore, in the light of international trends in use on the one hand, and studies on users on the other, we wonder about the postulates of this type of mechanical model based on the rationality of the actors.

Finally, Aquatias et al., conducted a study on cannabis use among youth in the suburbs of Paris.⁴⁸ The authors make a particularly interesting distinction between forms of use based on user characteristics and the ideological representations of cannabis use. They demonstrate in particular (1) that there exist “hard” uses of soft drugs and (2) that the traditional distinction between the festive, socially integrated and group-regulated forms of use among middle class youth, and the excessive and socially unregulated uses of disadvantaged youth does not hold. Depending on factors related to their environment, both groups can have regulated and unregulated forms of use.

Factors traditionally associated with unregulated use such as social disenfranchisement, poor living conditions in the suburbs and the lack of professional integration, are only part of the picture. Other factors related to tensions arising in the environment (for example family-related problems or being in conflict with the law) and the capacity to remain autonomous from their social milieu also play an important role in the trajectories of these cannabis users.

[Translation] In trying to understand what factors determined these different forms of cannabis use among these youths, we have obviously noted the importance of factors related to social dislocation: difficulties in social integration and a lack of financial resources capable of fostering their autonomy from the living environment.

However, facing similar difficulties to get a job and socio-economic resources, some smoke cannabis without any excess, some not at all and others smoke considerably. Even within the group of youth who have a job, some smoke high potency cannabis intensively while others have more regulated forms of use and consume less.

Social dislocation is obviously a factor explaining the different forms of use just as integration in the job market serves to regulate these practices. But these complementary factors only constitute the more general context to these behaviours of intensive and prolonged use of cannabis.

(...)

Among those who experience social dislocation the most, those who smoke cannabis in an intensive and prolonged manner also experience the strongest social tensions such as problems with their local reputation, being in conflict with the law or family related problems... (...).

*Conversely, those who have a more regulated use are both better integrated in their environment and at the same time more autonomous with respect to local social life.*⁴⁹

⁴⁸ Aquatias, S., (1999) « Usages du cannabis et situations sociales. Réflexion sur les conditions sociales des différentes consommations possibles de cannabis. » in Faugeron, C. (éd.) *Les drogues en France*. Paris: Georg. Pour l'étude originale: Aquatias. S. et coll. (1997) *L'usage dur des drogues douces, recherche sur la consommation de cannabis dans la banlieue parisienne*. Paris: OFDT.

⁴⁹ Aquatias, S. (1999) *op. cit.*, pages 48-49.

The authors propose a classification of forms of use which we reproduce since it has, in part, inspired our own classification.⁵⁰

	Regulated solitary uses	Regulated group uses	Unregulated solitary uses	Unregulated group uses
Intensive use	After work	Boredom	Personal problems	Holidays, parties
Medium or low level of use	Before and after work	Generally in the evening Boredom		

Finally, the authors distinguish between four levels of use:

- Occasional: from experimentation to use in parties;
- Moderate daily use: 3 to 5 joints per day or about one gram;
- Strong daily use: 5 or 6 joints per day or between 0.9 and 1.2 grams;
- Intensive daily use: over 1.2 gram per day.

To summarize

From an analysis of the life stories of users and their “trajectories”, we have learned primarily that, for a proportion of experimenters, which varies between 15% and 20% of the population, who will become regular users, the circumstances and patterns of their “career” as a user vary considerably but that for a significant proportion of these long-term users, use is integrated into their social and personal life.

Further, contrary to some studies, uses of cannabis are not determined only by a series of psychological or environmental factors. In all cases, it seems that specific events, elements of one’s particular life story, can trigger unregulated forms of uses, characterized in particular by intensive and solitary use. While such unregulated uses appear to be temporary, we did not come across any study that examined the trajectories of these users.

We also note that negative social attitudes and the characteristic of the cannabis market appear to have little impact on patterns of use.

Finally, we note that regular use does not necessarily mean problem use. At the same time, we have learned that early onset and rapid progression towards regular use are factors in problem use. In other words, and this will be important for choosing public policy and interventions, initiation at a young age (under age 16) and rapid progression towards regular use (under age 20) are markers that should be used to identify and prevent heavy use. Chapter 7 will discuss this issue in greater detail.

⁵⁰ *Ibid.*, page 45.

STEPPING STONE TO OTHER DRUGS?

The stepping stone theory holds considerable sway in debates on marijuana. In fact, the concern is that cannabis use leads to the use of other drugs, in particular, the so-called hard drugs, such as heroin and cocaine.

*It logically follows that more people using drugs will increase the number of people being harmed by them. Cannabis is believed to be the foundation upon which most young people begin experimenting with illicit drugs. (...) The “gateway” concept has been around for a long time, and again, although there is no definitive evidence, the National Institute on Drug Abuse has reported that neuro-toxicological research suggests that marijuana “may alter the brain in ways that increase the susceptibility to other drugs.” Many believe that cannabis use provides the impetus for those people looking to increase the psychotropic effect a drug has on them.*⁵¹

We should first define our terms. The “stepping stone” theory holds that cannabis use inevitably leads to use of other drugs. In this theory, cannabis use would lead to neurophysiological changes, affecting in particular the dopaminergic system (also called the reward system), thus creating the need to move on to the use of other drugs. This theory has been completely dismissed by research. We share this conclusion with several international bodies doing drug research, including the British organization *DrugScope*:

*The Stepping-Stone theory has proved unsustainable and lacking any real evidence base. The “evidence” that most heroin users started with cannabis is hardly surprising and demonstrably fails to account for the overwhelmingly vast majority of cannabis users who do not progress to drugs like crack and heroin. The Stepping-Stone theory (often confused among the general public for the Gateway theory) has been dismissed by scientific inquiry. The notion that cannabis use “causes” further harmful drug use has been, and should be, comprehensively rejected.*⁵²

The “gateway” theory suggests that users’ trajectories offer them choices as they start their trajectory of use and that one of these choices is to use other drugs. According to this theory, certain factors, such as early initiation and more regular and heavier use, reinforce this possibility. However, these factors themselves, and early initiation to cannabis in particular, are related to earlier factors, arising from the family environment and social living conditions, that predispose the more vulnerable young people to this early initiation and more rapid progress towards regular and heavy use.

⁵¹ M. J. Boyd, Chair of the Drug Abuse Committee and Deputy Chief of the Toronto Police Service, Canadian Association of Chiefs of Police, testimony before the Special Senate Committee on Illegal Drugs, Canadian Senate, first session of the thirty-seventh Parliament, Issue 14, page 75.

⁵² *DrugScope* (2001) *Evidence to Home Affairs Committee Inquiry into Drug Policy*. Available on-line at: <http://www.drugscope.org.uk/druginfo/evidence-select/evidence.htm>

*The link between cannabis and other drug use, according to this explanation, is thus a reflection that there are a number of risk factors and life pathways that predispose young people to use cannabis and that they overlap with the life pathways that predispose young people to use other illicit drugs.*⁵³

In addition to these factors that predispose some young people to heavier use of psychoactive substances – including alcohol and tobacco first of all – the sociological conditions under which users can obtain cannabis are such that they are in contact with an environment that is at least marginal if not criminal. Dealers are often the same people who also sell heroin, crack, amphetamines, cocaine and ecstasy such that the probability that a young cannabis user, already more vulnerable due to the factors of his personal trajectory, would come into contact with these other substances more easily. We would also add that wholesalers and dealers “cut” or even mix their products; we were told at times that ecstasy, for example, could contain many things other than MDMA.

Furthermore, if it is true that use of substances such as heroin and cocaine develops almost necessarily out of prior use of marijuana, then it also develops out of the use of other substances, nicotine and alcohol in particular, which are more gateways to a trajectory of use than cannabis.

If we come back to trends in drug use in the population, while more than 30% have used cannabis, less than 4% have used cocaine and less than 1% heroin.

However, it is true that regular and heavy users are more likely than occasional users to use other substances. The study by Cohen and Kaal⁵⁴ discussed in the previous section shows for example that more than 90% of long-term cannabis users have also used tobacco and alcohol during their lifetime. Above all, it also shows that 48% in Amsterdam and 73% in San Francisco have used cocaine at least once in their life, and 37% in Amsterdam, 77% in San Francisco and 47% in Bremen have used hallucinogens at least once. Nevertheless, no regular cannabis users were regular users of other substances. The authors also show that the most common sequence is alcohol (around age 14), tobacco (around age 15), cannabis (around age 17), followed by other drugs in the early 20s.

We feel that the available data show that **it is not cannabis itself that leads to other drug use** but the combination of the following factors:

- Factors related to personal and family history that predispose to early entry on a trajectory of use of psychoactive substances starting with alcohol;
- Early introduction to cannabis, earlier than the average for experimenters, and more rapid progress towards a trajectory of regular use;
- Frequenting of a marginal or deviant environment;
- Availability of various substances from the same dealers.

⁵³ *Ibid.*

⁵⁴ Cohen and Kaal, *op. cit.*, page 92-93.

CANNABIS, VIOLENCE AND CRIME

It is clear that there is some association between psychoactive substances and crime. It is just as clear that this link is much more complex than is sometimes thought, as Professor Brochu pointed out during his testimony before the Committee.

Just in my office at the Université de Montréal, I have 2,973 studies that attempt to show a link between psycho-active substances and crime. Most of these studies come from the United States or from English-speaking countries, which tends to colour their perspective somewhat, since we know that our neighbours to the south have very clearly opted for a punitive approach to illegal drugs. What comes out of all these studies is that the link between drugs and crime is very complex.⁵⁵

Since his testimony, Professor Brochu has released the study he mentioned to the Committee.⁵⁶

We can examine the drug-crime relationship from at least three angles: the effects of the substance itself, the effects of the cost of the substance, and the drug's position in the criminal world.

A significant proportion of offenders have psychoactive substance abuse problems, predominantly with alcohol. In fact, the study concludes that alcohol is the substance most frequently associated with violent crime; in the case of crimes against property, illegal drugs predominate. Cannabis ranked third (3% to 6% according to the study), far behind alcohol (24%) and cocaine (8% to 11%).

With respect to the second approach, the authors establish that between 17% and 24% of inmates committed a crime to obtain the money needed to buy their substance of choice, most often cocaine.

Lastly, regarding the third approach, because illegal drugs are marginalized, users are exposed to a deviant environment. In the previous section we noted that, with regard to cannabis, the fact that dealers can offer heroin or crack as well as cannabis could promote a gateway trajectory towards these other drugs. Similarly, the fact that these substances are illegal could contribute to leading people to a trajectory of delinquency. Furthermore, the drug trafficking environment is a relatively violent environment where a whole series of crimes are committed. Lastly, the simple fact of selling cannabis is itself a criminal offence, and we know that a certain number of people are imprisoned for doing so.

All in all, cannabis itself does not lead to a trajectory of delinquency and it is more likely to be the other way around: someone who embarks on a trajectory of delinquency

⁵⁵ Professor Serge Brochu, Université de Montréal, testimony before the Special Senate Committee on Illegal Drugs, Canadian Senate, First Session of the Thirty-Seventh Parliament, December 10, 2001, Issue 12, page 18.

⁵⁶ Permanen, K. et al., (2002) *Proportions of crimes associated with alcohol and other drugs in Canada*. Ottawa: Canadian Centre on Substance Abuse.

when young is exposed to illegal drugs more quickly and can experiment at a younger age and begin a career as a user when younger.

Furthermore, simply because of its relaxing and euphoristic psychoactive effects and its effect of relaxing muscle tone, cannabis is hardly likely to lead to acts of violence.

Data from studies on long-term users confirm this global picture of the relationship between cannabis and crime. Thus, Cohen and Kaal noted that less than 5% of their respondents had committed offences to obtain cannabis (pilfering, shoplifting, theft). The offence committed most frequently in order to obtain cannabis was selling it.

In short, the Committee has learned that cannabis is not a cause of violence or crime except in rare cases, and of course excluding driving while under the influence, which will be dealt with in Chapter 8.

CONCLUSIONS

We have learned the following from all the information on trends, patterns, circumstances, trajectories and social consequences of cannabis use:

Conclusions of Chapter 6	
On trends in use	<ul style="list-style-type: none"> ➤ The infrastructure of national knowledge about the trends and circumstances of cannabis use is fundamentally weak and desperately needs strengthening. ➤ The epidemiological data available indicates that close to 30% of the population (12 to 64 years old) has used cannabis at least once. ➤ Approximately 10% used cannabis during the previous year. ➤ Up to 30% of those who used cannabis in the last year are current users (have used cannabis this month). ➤ Approximately 15% of current users would be daily users ➤ Use is highest between the ages of 16 and 24. ➤ The prevalence of use during the current year is highest, approximately 40%, in young people of high school age. ➤ The prevalence of monthly use in young people is approximately 30%. ➤ The prevalence of daily use in young people is approximately 9%.
On trajectories	<ul style="list-style-type: none"> ➤ The average age of introduction to cannabis is 15. ➤ Most experimenters stop using cannabis. ➤ Regular users were generally introduced to cannabis at a younger age. ➤ Long-term users most often have a trajectory in which use

	<p>rises and falls.</p> <ul style="list-style-type: none">➤ Long-term regular users experience a period of heavy use in their early 20s.➤ Most long-term users integrate their use into their family, social and occupational activities.
On the gateway effect	<ul style="list-style-type: none">➤ Cannabis itself is not a cause of other drug use.➤ Cannabis use can be a gateway because it is illegal, which puts users in contact with other substances.
On violence and crime	<ul style="list-style-type: none">➤ Cannabis itself is not a cause of delinquency and crime.➤ Young people with a trajectory of regular and heavy use are often already on a deviant if not delinquent trajectory.➤ Cannabis is not a cause of violence.

CHAPTER 7

CANNABIS: EFFECTS AND CONSEQUENCES

Cannabis, as we saw in Chapter 5, acts on the central and peripheral nervous systems in various ways. While research has established a fairly clear role for some of the components of cannabis, Δ^9 THC in particular, the main active component, we are less sure of the role of other chemicals. Similarly research, which is often conducted on laboratory animals or in an even more specialized manner on molecules extracted for experimental purposes, does not reflect the conditions under which the average user uses marijuana. We have seen that, in some cases, dosages used for experimental purposes on laboratory animals, in particular to determine the chronic effects of regular use, are dosages that are unimaginable for humans, the equivalent of 570 marijuana cigarettes a day. Since THC content varies greatly with the cannabis available on the market, since users make different use of the drug depending on the place and circumstance, and since individual characteristics interact with the actual effects of cannabis, knowledge of the effects is necessarily influenced.

From an even more technical standpoint, we should point out that a statistical association – that is, the fact that two facts are concomitant – in no way indicates causality. To infer causality, a certain number of methodological prerequisites must be satisfied. In addition to the statistical association, we must be able to dismiss chance and alternative hypotheses, and show that the causative factor does precede the inferred consequence. According to the WHO:

*Causal inferences can be drawn from research findings by judging the extent to which the evidence meets widely accepted criteria. These include: strength of association, consistency of association, specificity, dose-response, biological plausibility, and coherence with other knowledge. These criteria are not sufficient to show that an association is causal but the more are met, the more likely it is that the association is causal.*¹

¹ World Health Organization (1997), op. cit., page: 3; on this question also see: Hall, W. (1987) “A simplified logic of causal inference” *Australian and New Zealand Journal of Psychiatry*, 21: 507-513.

Moreover, a strong tradition in the philosophy of science holds that you can never prove a hypothesis. The most you can do is falsify – that is, dismiss – alternative hypotheses.²

To try to meet the requirements of causality, researchers have developed sophisticated research methods, providing in particular for the random selection of subjects for a study, the random assignment to experimental conditions and non-experimental conditions (control group), the use of double blind and placebo techniques, the careful control of intervening variables that could represent as many alternative hypotheses as researchers are trying to eliminate. This is how, for example, they usually try to test medications that are put on the market.

For most questions involving human behaviour, *a fortiori* in society, it is difficult and rarely possible to establish such a causality relationship for the simple reason that each of these methodological requirements can rarely be met. In our case, the effects of cannabis use, the methodological constraints are particularly obvious. We cannot gather a random sample of cannabis users since we don't know the population. Therefore we must rely on alternative methods for selecting subjects (volunteers, for example). It is difficult to have people smoke cannabis who would otherwise never use it³⁸ without running the risk of contravening certain rules of ethics, or even legal provisions. And if we resort to people who have already smoked it, there is necessarily contamination of the control group. The cannabis that is used in the lab may be completely different from that of users who buy it off the street. And controlled laboratory conditions definitely do not reproduce the methods of cannabis use, which we know are usually a form of social ritual. As for studies—and they are numerous—conducted on animals (monkeys, mice, rats...), they may be interesting, but the possibility of transposing their results onto humans is limited. Lastly, we note that, as most cannabis smokers also smoke tobacco and drink alcohol, it is difficult to separate the effects of one from the effects of the others.

Obviously that does not prevent researchers from conducting studies, and these studies are also necessary. However, it does require researchers to be as prudent as possible when interpreting their results, in particular with respect to the ability to generalize about all marijuana users and to draw causal inferences. This is a caution that we do not always find, far from it, as this chapter will repeatedly show.

Lastly, we should note the distinction between effects and consequences. Smoking cannabis has immediate effects, some physiological and some psychosocial, that we must describe. But smoking cannabis, especially repeatedly, can also have consequences, some immediate – for example, the ability to perform certain tasks or

² On this subject, see the works of Karl Popper in particular (1978 for the French edition) *The Logic of Scientific Discovery* Paris: Payot, and (1985) *La connaissance objective*. Bruxelles: Complexe.

³ It is even a little ironic that the National Institute on Drug Abuse (NIDA) in the US finances studies that have people smoke when the Institute believes that cannabis is a gateway drug: for example, see the study by Haney, M. et al. (1999) “Abstinence symptoms following smoked marijuana in humans” *Psychopharmacology*, 141; 395-404.

the ability to drive a vehicle – and others more distant – for example if smoking cannabis results in a greater risk of lung cancer and if it has a lasting effect on memory.

We are aware of just how arbitrary these distinctions can be insofar as a human being is a whole, an organism integrated into his emotional and social environment and into his ecosystem. The physiological, psychological and social effects interact with one another, infiltrate one another, influence one another and act together rather than separately. In some ways, these distinctions remain the reflection of our incompetence, or at least of our inability, to think about the various systems of a human being as a whole, from every angle. This same incompetence can, also in part, explain the difficulty we have in creating a drug policy. It is to be hoped that those who come after us will be able to develop an integrated, holistic approach. For now, we are forced to use the means at our disposal, our fragmented understanding.

One last preliminary note. We were constantly guided by the need to be rigorous. Be that as it may, our resources did not enable us to be completely thorough and to examine the studies one by one for all these questions. In total, we know that approximately ten thousand studies have been published on cannabis over the last forty years! However, as Nelson points out, “*Although the total volume of this literature is somewhat daunting at first glance, a sampling of the material soon reveals that much is repetitive and a relatively small number of papers are continually referred to by most authors.*”⁴ Despite this repetition, we could not go without examining a certain number of these studies. That is why we commissioned the preparation of a summary report⁵ and also examined the summaries of scientific literature that were prepared in recent years.⁶

This chapter is divided into five sections. The first is a collection of statements on the presumed effects of marijuana that the Committee heard or that it was made aware of through its research. The following three sections examine the acute effects of cannabis, followed in turn by the physiological and neurological consequences, the psychological consequences and the social consequences. Then, because of its significance and the central place it holds in social and political concerns, we turn our attention specifically to the question of dependence possibly arising from prolonged use of cannabis.

⁴ Nelson, P.L. (1993) “A critical review of the research literature concerning some biological and psychological effects of cannabis” in Advisory Committee on Illicit Drugs (eds.) *Cannabis and the law in Queensland: A discussion paper*. Brisbane: Criminal Justice Commission of Queensland.

⁵ Wheelock, B. (2002) *op. cit.*

⁶ In particular the previously mentioned INSERM report (2001), *op. cit.* and the report from the International Scientific Conference on Cannabis (2002); as well as the report from the National Institute of Medicine in the US and the book edited by Professor Kalant, one of our witnesses.

EFFECTS AND CONSEQUENCES OF CANNABIS: WHAT WE WERE TOLD

During the hearings, many witnesses told us what they knew about the effects of cannabis. Some of this knowledge came from their own research work. Other knowledge came from their professional experiences. And lastly, other knowledge was either their interpretation of scientific literature or anecdotes. In this section, we will not make distinctions between the testimony and we will not evaluate its validity. We only want to highlight the richness, as well as the complexity, of what we were told.

*Message number one is that drugs, including cannabis, are harmful. (...) There is considerable misinformation about the physiological consequences of cannabis use. There is no doubt that heavy use has negative health consequences. The most important are in the following areas: respiratory damage, physical coordination, pregnancy and postnatal development, memory and cognition, and psychiatric effects. (...)*⁷

*Generally, marijuana (cannabis) and its derivative products are described in this context to distance the drug from the recognized harm associated with other illegal drugs. This has been a successful yet dangerous approach and contributes to the misinformation, misunderstanding and increasing tolerance associated with marijuana use. Marijuana is a powerful drug with a variety of effects. Marijuana users are subject to a variety of adverse health consequences that include respiratory damage, impaired physical coordination, problem pregnancy and postnatal deficits, impaired memory and cognition, and psychiatric effects. Marijuana use is associated with poor work and school performance and learning problems for younger users. Marijuana is internationally recognized as a gateway drug for other drug use. Risk factors for marijuana dependence are similar to those of other forms of drug abuse. (...) It was the consensus of the international community to put marijuana and other substances under international control. That decision was based on evidence of its harmfulness to human health and its dependence potential.*⁸

I wish to briefly review two of what I believe are fairly well-established, harmful effects of marijuana, and a number of other areas where there is considerable contention. (...) By far the most consistent and clear-cut effect of marijuana is disruption of short-term memory. Short-term memory is usually described as "working" memory. It refers to the system in the brain that is responsible for short-term maintenance of information needed for the performance of complex tasks that demand planning, comprehension and reasoning. The relatively severe impairment of working memory may help to explain why, during the

⁷ Testimony of Michael J. Boyd, Chair of the Drug Abuse Committee and Deputy Chief of the Toronto Police Service, for the Canadian Association of Chiefs of Police, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, Issue No. 14, page: 74.

⁸ Testimony of Dale Orban, Detective Sergeant, Regina Police Service, for the Canadian Police Association, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, Monday, May 28, 2001, Issue 3, page: 47. It should be immediately noted that the last statement is completely false as we will see in Chapters 19 and 12 on international agreements and Canadian legislation that have placed cannabis on the list of controlled drugs since 1924, with no knowledge of its physical or psychological effects at that time, and for completely different reasons, when there were any.

*marijuana high, subjects have difficulty maintaining a coherent train of thought or conversation. (...) Obviously this is relevant if you are going to school stoned. (...) It is becoming increasingly clear that cannabis is a drug on which regular users become dependent, and that this adversely affects large numbers of people.*⁹

*Marijuana has been shown to be associated with reckless drivers and motor vehicle accidents. Evidence suggests that marijuana may contribute to an appreciable number of traffic deaths and injuries in Canada. It has been shown to negatively affect the academic and social development of some adolescents. Marijuana can cause emotional and medical problems. Chronic use may be associated with lung diseases such as bronchitis, emphysema and cancer. A psychosis may develop in some individuals while other psychiatric symptoms such as anxiety, low mood, depression and panic do occur. Marijuana is known to be addictive. Although the rate of addiction varies, it is between 5 per cent and 10 per cent. I should like to stress that addiction is a disease and marijuana has the potential to be addictive to a genetically predisposed group of individuals.*¹⁰

*The evidence was that 95 per cent of the marijuana users in Canada are low, occasional, moderate users. Their consumption of marijuana does not impact on their health as long as they are healthy adults. The other 5 per cent are chronic users, people who smoke one or more marijuana cigarettes per day. If they continue to do that, they will ultimately get chronic bronchitis from the smoking process. The same would be true if they were to roll up the grass off their lawns and smoke that. They would inhale heated material over their large airways and cause damage to them. There were three primary vulnerable groups: pregnant women, which we submit is something between the woman and her doctor; the mentally ill, particularly paranoid schizophrenics (...) then, most importantly, immature youth. Young people who become involved with marijuana - particularly on a regular basis - seem to suffer from a disruption of their studies and the maturation process. As is the case with most intoxicants, it is recommended that they not become involved with them until they have matured.*¹¹

*I have one resource from the Center for Substance Abuse Prevention in the U.S., where recent marijuana research and a number of studies indicate some of the risks. We already know and accept that cannabis has negative effects on many systems - respiratory, motor skills, memory and immune - and that it creates drug dependency and tension. In addition, we now know from numerous research studies that there is a definite and acute withdrawal syndrome associated with chronic cannabis use. (...) There is research that suggests there are effects on the developing fetus. (...) I will speak to visual scanning, specifically, attention dysfunction in the form of impaired visual scanning and related functioning. Visual scanning develops particularly in early adolescence, so earlier onset is associated with some concerns there.*¹²

⁹ Dr. Mark Zoccolillo, Professor of Psychiatry and Assistant Professor of Pediatrics, McGill University and the Montreal Children's Hospital, Special Senate Committee on Illicit Drugs, Second Session of the Thirty-Sixth Parliament, October 16, 2000, Issue No. 1, page 77.

¹⁰ Dr. Bill Campbell, President, Canadian Society of Addiction Medicine, Special Senate Committee on Illicit Drugs, First Session, Thirty-Seventh Parliament, March 11, 2002, Issue No. 14, page: 56.

¹¹ Mr. John Conroy, Barrister, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, March 11, 2002, Issue No. 14, page 11.

¹² Dr Colin Mangham, Director, Prevention Source BC., Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, September 17, 2001, Issue No. 6, page: 71.

*There are a number of negative health effects that have been created in the lab or have been observed with long-term users (...). There are, of course, health risks and negative health consequences with using the substance, but the majority of those risks only occur under specific circumstances. The majority of the risks are associated with long-term persistent and frequent use, and therefore must be understood as such. There is at this point agreement that the so-called dependence or withdrawal symptom may arise with heavy chronic users, but it is very much limited to that small population. (...) a seminal report by Hall and colleagues from Australia (...) concluded that the major risks of cannabis use can be significantly reduced by avoiding driving under the influence, by avoiding chronic and daily use, and by avoiding deep inhalation. These were the key factors that allowed us to avoid many of the major harms and risks associated with it.*¹³

In any event, we are talking about plant derivatives that contain a number of psychoactive alkaloids. The psychoactive effects are predominantly of mild euphoria and time distortion, though disorientation and panic attacks may occur. The appreciation of music, art and food are said to be enhanced, as is appetite, and this later function seems important for one of the claimed medical benefits in offsetting the effects of the chronic wasting syndrome in AIDS and the prolonged nausea that accompanies chemotherapy. (...) Because the drug is usually smoked, it has acute and chronic effects that are shared with tobacco. These include airway irritation, cough, and probably with chronic use, bronchitis, chronic obstructive pulmonary disease, and lung and pharyngeal cancers. Its impact on the immune system is generally to impair the function of the immune system, but the impact on human health of this impairment is probably minor. (...) The effects of cannabis consumption on reproductive health are negative in animal studies. (...) This obviously has some relevance to human health. However, human studies have yet to show any measurable adverse impact beyond some evidence of adverse behavioural and developmental impacts on the children of mothers who smoked cannabis heavily during pregnancy. (...) The impact of cannabis on cognition is well documented. Short-term memory is adversely affected and chronic use may lead to chronic measurable defects in cognitive functioning. However, this may be more the result of persistent chronic intoxication than impairment in the substance and the working of the brain. Psychomotor skills are adversely affected by cannabis use. Driving or operating heavy machinery when intoxicated is contraindicated. Again, in contradistinction to alcohol, cannabis intoxication tends to slow drivers down rather than increase their speeds. Similarly, cannabis smokers tend not to be involved in acts of physical violence and aggression, and violence and aggression when intoxicated is reportedly very rare. Cannabis use may provoke schizophrenic symptoms in those with active schizophrenia or schizophrenic tendencies. Panic attacks and dysphoria are also mentioned in the literature. There is an amotivational syndrome described in the literature and cannabis is said to induce it, but most researchers have discredited that over the last decade. (...) Concerns have legitimately been raised about the effects of cannabis consumption on adolescent development. As use tends to peak in late adolescence, this is an important consideration. The adverse effects that have been noted include an association with risk of discontinuation of high school, job instability and progression to the use of harder drugs. The degree to which these associations are causal is very controversial. Alternative hypotheses are that cannabis use, like adolescent alcohol use, early onset of sexual activity, and tobacco smoking, are in fact markers for other risks of adverse social conditions (...) All researchers agree, however, that intoxication interferes with academic prowess. Recent studies seem to demonstrate measurable though reversible drops in IQ associated with

¹³ Dr. Benedikt Fischer, Professor, Department of Public Health Sciences, University of Toronto, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, September 7, 2001, Issue No. 6, page 9.

*heavy, persistent cannabis use and that engagement in illicit activities carries substantial risks, especially perhaps for youth whose connections to the school community are tenuous at best.*¹⁴

*I would like to first focus on the acute effects and then on the chronic effects. "Acute effects" are those effects that you experience during the course of action of a single dose. In the nervous system that includes a period of several hours in which (...) you become "chemically stupid." Side effects include decreased arousal and drowsiness, which acts together with the drowsiness produced by alcohol and other central nervous system depressants. Other side effects are impaired short-term memory, slowed reactions, less accuracy in test performance and less selectivity of attention. (...) Low doses generally produce the effects that cause people to like smoking pot. They include mild euphoria, relaxation, increased sociability and a non-specific decrease in anxiety. However, high doses produce a bad mood, anxiety and depression. There can be increased anxiety to the point of panic or even an acute toxic psychosis which, fortunately, is of very short duration and goes away when the drug effect wears off. High doses cause impaired motor coordination, unsteadiness of control and decreased muscle tone, which is therapeutically useful. (...) With low doses, perception is enhanced. That is part of the pleasure. In high doses, the same action produces sensory distortion, hallucinations and the acute toxic psychosis to which I have already referred. (...) It does not seriously affect the cardiovascular system. (...) As to chronic effects, in the central nervous system there is impaired memory, vagueness of thought, decreased verbal fluency, and learning deficits in chronic, heavy users. I emphasize "heavy" because the social user does not, by and large, show any significant health effects. Neither does the social user of alcohol. (...) These effects on cognitive functions fortunately tend to go away if the heavy user stops, for whatever reason. As long as use continues, there is a chronic intoxication, apathy, confusion, muddled thinking, depression, and sometimes paranoia. (...) Cannabis dependence, as defined in the conventional diagnostic criteria for dependence as set out in the latest edition of the American Psychiatric Association, or the equivalent publication of the World Health Organization, has been well documented in regular, heavy users. Numerous studies now show that a significant percentage of regular users are dependent. In some studies in Australia of long-term heavy users, mainly daily users for periods of 15, 17, 20 years, 60 per cent or more of them met the diagnostic criteria (...). Tolerance has been shown. By and large, it is not a terribly serious effect, and the physical withdrawal syndrome is not severe. Nevertheless, it is there, which indicates that physical dependence, in addition to psychological dependence, occurs as well.*¹⁵

*The long-term chronic effects of cannabis essentially cause the following symptoms: memory loss, faulty attention and concentration, a slow-motivation syndrome of passivity and low initiative, increased risk of respiratory disease, more specifically asthma, bronchitis and emphysema and a higher risk of cancer. (...) There may be hormone problems causing low fertility in men and women. In men, this can cause the development of breasts which is very unesthetic (...). Finally, in the long-term, it can also cause lower resistance to infectious disease.*¹⁶

¹⁴ Dr. Perry Kendall, Health Officer for the Province of British Columbia, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, September 17, 2001, Issue No. 6, pages 33-33.

¹⁵ Dr. Harold Kalant, Professor Emeritus at the University of Toronto, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, June 11, 2001, Issue No. 4, pages 74-76.

¹⁶ Dr. Mohamed ben Amar, Professor of Pharmacology and Toxicology, University of Montreal, Special Senate Committee on Illicit Drugs, First Session of the Thirty-Seventh Parliament, June 11, 2001, Issue No. 4, pages 9-10.

As we can see, opinions sometimes agree and often differ. They agree at least on the nature of the consequences that may be of concern. One by one, we have seen effects that were physiological (risks of cancer, effects on reproduction and the immune system, deterioration of brain cells), effects that were psychological (amotivational syndrome, risks of psychosis, impaired cognitive function and memory in particular), and effects that were social (affecting the family and work, as well as the ability to drive vehicles and operate machinery). Opinions differ primarily on the scope of the conclusions that can be drawn from this knowledge. To what extent, in fact, can we generalize about the effects we observe in often small and rarely random samples of subjects? Also, to what extent can we generalize about the data on chronic users who represent – as we saw in the previous chapter – only a small percentage of cannabis users? And especially, to what extent does this data allow us to establish causal relationships?

The Committee also finds that most witnesses stressed the negative aspects and rarely the positive. However, if people use drugs in general, and cannabis in particular, surely it isn't just to destroy themselves or because these drugs have only negative effects. Given the limitations of making any comparison between substances, we can still draw a parallel with alcohol: most of us know the pleasure of sharing a glass of wine with friends over a good meal, just as we also know the dangers of alcohol abuse and alcoholism. The Committee also notes that it is difficult, even for the most experienced researchers, to sift through the knowledge without assigning it a valence relative to the direction public policy should take. The same knowledge may be interpreted negatively here and more moderately there, based on the interpreter's preconceptions of the "best" choice for public policy. We are not immune to this bias. Moreover, we do not deny that we had preconceptions, derived from our personal histories, our reading, and the hearings we held in 1996 to review Canada's drug legislation. Among these preconceptions, which oriented our reading of the testimony, at least at first, we note:

- The conviction that the current system does not achieve its objectives, if only because of the increase in cannabis use, by young people in particular;
- A preference for an approach that is more consensual and more in keeping with Canadian attitudes;
- A preference for a harm-reduction approach as indicated by the wording of our first mandate;
- A tendency to distinguish between soft drugs – including cannabis – and hard drugs (heroin, cocaine);
- A certain lack of knowledge about the specific effects of cannabis, from the standpoint of the toxicological and pharmacological studies conducted in recent years.

This being said, we did not work in isolation. Not only were we accompanied by our research team – sociologists, lawyers, criminologists – throughout our work, not only were we also under the close surveillance of the witnesses in a way and of the public in a larger sense, but primarily, other committees, in other countries, have conducted similar reviews in recent years. Their work was a source of inspiration and knowledge and as well a benchmark against which to compare our own conclusions.

ACUTE EFFECTS OF CANNABIS

In toxicology, acute effects are those that are produced immediately after use and while the psychoactive effects are being experienced. These effects also correspond to what has been called cannabis intoxication ever since Moreau de Tours in 1845.¹⁷ The “real” effects – on biological systems – and the effects experienced by users can vary based on a set of factors, such as the user’s experience with cannabis and other drugs (including tobacco), the user’s expectations and the context of use. In fact, [translation] “*the psychoactive effects of cannabis, more than any other substance, vary from one subject to another and, for the same subject, from one experience to another.*”¹⁸ Additionally, with no reliable method to measure THC content in plasma, it is difficult to link the duration and strength of effects to the various cannabis preparations, in particular because of variations in the composition of the substance and in the bioavailability of THC. It is even more difficult to attribute relatively rare effects (for example, the appearance of psychotic symptoms) insofar as it is hard to decide if the co-occurrence is coincidental, if these effects stem from other substances often associated with cannabis use or from very high doses of cannabis, or from interactions between these various factors.¹⁹

The acute effects of cannabis are relatively well documented. Research sometimes distinguishes between central and peripheral effects²⁰, sometimes between somatic effects and psychological or psychomotor effects²¹, and sometimes is simply content to list the effects of one type or another.²²

Cannabis intoxication is generally considered to consist of two main phases:

¹⁷ Moreau de Tours, J., *Du haschich ou de l'aliénation mentale, étude psychologique*. Paris: Masson.

¹⁸ INSERM, *op. cit.*, page 118.

¹⁹ See WHO, 1997, *op. cit.*, 3.

²⁰ For example, this is the case with the classification proposed by Ben Amar (at press).

²¹ This is the case with the collective expertise of INSERM (2001).

²² This is the case with most works: WHO, 1997; Swiss Federal Commission for Drug Issues (1999) *Rapport sur le cannabis*. Berne: Swiss Federal Office of Public Health; and the report by Wheelock (2002).

- ❖ The first phase, the “high”, includes the following effects:
 - A change in general mood, accompanied by gaiety or even hilarity, talkativeness, and a carefree feeling
 - A change in physical experience, including a feeling of well-being and satisfaction, a feeling of calm and relaxation, sociability
 - Alteration of intellectual functions, including increased self-confidence, magical thinking (feeling of being able to perform tasks more easily), distorted perception of time, space and self-image
 - Sensory changes, marked by increased sensory perceptions (colours, sounds sometimes seem more intense), stronger tactile impressions.
- ❖ The second phase, “coming down”, is characterized by a feeling of sluggishness or drowsiness that appears gradually a little while after use.

More specifically, depending on their type of action, a distinction is made between truly somatic effects and more psychological ones.

❖ Somatic Effects:

- Cardiovascular effects: approximately 10 minutes after use, heart rate, cardiac output and cerebral blood flow increase. Tachycardia (accelerated heart rate) can achieve increases of 20% to 50% compared to normal rhythm and could help trigger anxiety and panic attacks in some subjects. It can be responsible for palpitations, reduced exercise tolerance in subjects with heart conditions, and can even facilitate the development of heart problems in subjects who are at risk or are predisposed. A recent study suggests that the risk of myocardial infarction increases by 4.8 times in the first hour after using marijuana and is 1.7 times higher in the second hour, thus suggesting that cannabis may represent a risk in the 60 minutes following its use. Hypotension while the subject is lying down is also mentioned. These effects vary based on the dose and concentration of THC.
- Bronchopulmonary effects: the effects are similar to those of tobacco. Bronchodilator activity in the 60 minutes following use is mentioned. However this does not prevent the inflammatory consequences of smoking cannabis nor the secondary bronchial hyperreactivity that is translated in particular by a cough that results from the action of the THC and the irritating potential of the products of combustion;
- Ocular effects: redness of the eyes due to vasodilation and conjunctival irritation is mentioned;

- Other somatic effects: dry mouth due to decreased saliva secretion, increased appetite due to hypoglycemia (drop in blood sugar level), and more rarely nausea and vomiting, diarrhea and urine retention.
- ❖ Psychological and Psychomotor Effects:
 - Diminished short term memory (so-called “working” memory): remembering words, pictures, stories and sounds;
 - Disturbances in psychomotor performance, including diminished ability to pay attention and concentrate, diminished reflexes, slowed reaction time, problems with coordination of movements, and impaired and diminished ability to perform complex tasks. Thus, a study by Fant et al. describes diminished visual tracking in the central and peripheral fields of vision after 15 minutes, capable of lasting for more than 5 hours.²³ Moreover, we note that according to professor Roques, studies on the effects of cannabis on learning abilities, in particular short term memory and working memory, are open to criticism from the standpoint of methodology and their contradictory results, “*the heaviest users were the least affected*”.²⁴ [translation]

Somatic, cognitive and psychomotor effects are related to the amount of cannabis inhaled and the concentration of THC. Thus, according to INSERM:

*A quantity that corresponds to 25 puffs impairs psychomotor skills and cognitive performance, and more markedly than consumption of 10 puffs or 4 puffs. Maximum plasma levels then rise from 57 ng/ml (for 4 puffs from a cigarette containing 1.75% Δ^9 THC) to 268 ng/ml (for 25 puffs from a cigarette containing 3.55% Δ^9 THC). Heishman et al. (1997) established an approximate equivalence between 16 puffs at 3.55 % Δ^9 THC and approximately 70g of alcohol. At these levels, memory, cognitive and psychomotor performance and mood are impaired.*²⁵ [translation]

The cognitive and psychomotor effects may continue for more than five hours, and some cognitive impairment may extend for 24 hours.

At high doses, or with inexperienced users, cannabis may cause a certain number of negative reactions that can even include a genuine paranoid, hallucinatory, manic or hypomanic psychotic experience. However these experiences are brief. Some disorders documented with high doses include:

²³ Fant, R.V. et al. (1998) “Acute and residual effects of marijuana in humans.” *Pharmacology, Biochemistry and Behavior*, 60: 777-784.

²⁴ Roques, B. (1999) *La dangerosité des drogues*. Paris: Odile Jacob, page: 184.

²⁵ INSERM, *op. cit.*, page: 203.

- Anxiety, even panic attacks
- Confusion or disorientation
- Vertigo, nausea or vomiting
- Convulsions
- Depersonalization
- Hallucinations
- Paranoia
- Acute psychosis

These phenomena are relatively rare (less than 1 in a thousand psychiatric admissions). Primarily, it is difficult to establish that cannabis was the cause. In fact, in most cases, the most likely hypothesis is that these subjects were already predisposed, or had even already had psychotic or schizophrenic experiences. Use of other substances, alcohol, other illicit drugs, or medications, could also play an important role.

*The link between cannabis use and psychosis is a very controversial issue. At the moment, we lack a corpus of comparable, methodologically sound studies repeatedly yielding similar conclusions. The results of existing studies are often complex or ambiguous and the personal opinions of the researchers often interfere with the interpretations. Further deepening our scientific knowledge is still necessary. However, there is extensive, albeit incomplete, consensus on the ability of heavy cannabis consumption or intoxication to induce an acute transitory psychotic state in healthy subjects. The frequency of this condition is unknown and the mechanisms are hypothetical.*²⁶

In accordance with the collective expertise of INSERM, we can establish the following:

*The psychotic disorders caused by cannabis use are brief psychotic episodes that last less than two months, even four months[sic], sometimes a week. The premorbid personality does not present a pathological aspect. Regular users are at greater risk than occasional users. Onset is abrupt, in two or three days, with or without a recent increase in the use of toxic agents, sometimes with a psychological or somatic precipitating factor. Some symptoms appear more specific: behavioural problems, aggression, visual hallucinations, polymorphic nature of the delirium along various themes, psychomotor disinhibition. (...) Compared to a schizophrenic disorder, subjects are younger, 20 to 30 years of age rather than 25 to 30, with a greater proportion of poorly socialized males.*²⁷ [translation]

²⁶ Hanak, C. et al. (2002) "Cannabis, mental health and dependence." in Pelc, I. (ed.), *International Scientific Conference on Cannabis*, Brussels.

²⁷ INSERM, *op. cit.*, page 124.

However, here too, the data are relatively contradictory and, according to professor Roques, there is support for the belief that usage is more widespread among people with previous mental disorders.²⁸

CONSEQUENCES OF CHRONIC USE

Most of the works consulted in pharmacology, toxicology and psychiatry speak of chronic effects. For our part, we prefer to speak of *consequences* resulting from chronic use. There are two reasons for this. First of all, because these consequences result not so much from the substance itself as from the way it is used. Therefore we are not dealing with the effects of the substance, but rather with the consequences that may arise from repeated, or even heavy, use. The second reason is that, as we saw in Chapter 6, chronic cannabis users account for a small fraction (often less than 10%) of lifetime users of cannabis. As a result, the consequences in question in this section concern this small portion of the population of users and not the substance itself.

We feel this distinction is fundamental because it is common, at all levels of public discussion – whether involving politicians, the public at large, or experts – to blame the substance – here cannabis, there alcohol or medications, even other illicit drugs—when in fact we must *learn to distinguish between patterns and methods of use*. By that we mean at-risk behaviour, which varies with the substance of course, and which does not depend solely on the intrinsic properties of the substance, but stems, in an overall approach, from the relationship between the substance and its place in society (integrated or not) from the individual's characteristics, and from the society in which the substance is used.²⁹ Of course by that it should be clear that ***we consider as separate, for cannabis as for alcohol, use, at-risk use and heavy use*** (or abuse)³⁰, and that we reject the equivalency often made between use and abuse where any form of use is perceived as abuse. At the same time, we are aware of the vagueness that continues to surround these various types of behaviour – or practices – and that there is no clearly defined boundary, even less a universal boundary, between use, harmful use and dependence. For the purposes of this chapter, the consequences in question in the following three sections refer, without being more specific, to chronic use (which then includes at-risk and heavy use).

²⁸ Roques, B., *op. cit.*, page 186.

²⁹ This question has been discussed more fully in Chapter 6. For now it is enough to refer the reader to the work of Reynaud et al. (1999) *Les pratiques addictives. Usage, usage nocif et dépendance aux substances psychoactives*. Paris: La Documentation française.

³⁰ We will more clearly establish the parameters we used to make this distinction in the next chapter on use and users. Further on in this chapter we will see that dependence is a consequence of heavy use.

Physiological consequences of chronic use

The main physiological consequences of the chronic use of cannabis dealt with in scientific literature concern the respiratory system and the carcinogenicity of cannabis, the immune system, the endocrine system and reproductive functions and, to a lesser degree, the cardiovascular system.

Consequences for the respiratory system

Except for the nicotine in tobacco and the cannabinoids in cannabis, the smoke of these two products shares common irritating, even carcinogenic, properties. Although not recent, a comparative analysis of these products has shown that the concentration of certain strongly carcinogenic ingredients such as benzopyrene and benzanthracene is higher in cannabis smoke than tobacco smoke.³¹ A more recent study cited by INSERM confirms this higher concentration of benzopyrene: 2.9 micrograms/100 joints compared to 1.7 for 100 cigarettes.³² Of course, it will be argued that tobacco users generally smoke many more cigarettes a day than even chronic users of marijuana, that it is the total volume of toxic substances inhaled over time that counts, and that it can be difficult to distinguish the effects of cannabis from those of tobacco since joints often contain both products and users of cannabis are also often tobacco smokers.³³

However we note other worrisome characteristics with respect to the potential effects on the respiratory tract of smoking cannabis. First of all, the concentration of benzopyrene in marijuana tar is 70% higher than that in the same weight of tobacco tar. Furthermore, an equal product weight of cannabis provides up to 4 times more tar than a strong tobacco. According to a study cited by INSERM, tar from a joint varies between 40 and 56 mg/cigarette whereas the allowable dose for a European tobacco cigarette is 12 mg.³⁴ In addition, a marijuana cigarette is generally smoked much more completely than a tobacco cigarette, inhalation – an important part of the ritual – is deeper and the smoke is held in the lungs longer and the combustion temperature of cannabis is higher than that of tobacco. Consequently, the percentage of tar deposited in the lungs is higher after smoking cannabis (> 80%) than after inhaling tobacco (64%) and the deposits are even greater for cannabis with a lower concentration of THC, probably because smokers draw on the joint more.³⁵

According to INSERM's report, chronic use of cannabis "*results in unquestionable bronchial disorders (...) chronic bronchitis with a chronic cough, expectorations and a sibilant rale*"³⁶ [translation], a conclusion shared by the Institute of Medicine in the United States in its

³¹ Institute of Medicine (1982) *Marihuana and Health*. Washington, DC: National Academy of Sciences.

³² INSERM (2001), op. cit., page 222.

³³ For example, those are the criticisms made by Zimmer L., and J.P. Morgan (2000 for the French version; 1997 for the American original) *Marijuana. Mythes et réalités*. Paris: Georg editor.

³⁴ *Ibid.*, page 221.

³⁵ *Ibid.*, page 221

³⁶ *Ibid.*, page 218.

recent report on marijuana³⁷ as well as by the WHO.³⁸ Moreover, macrophages (cells that attack foreign bodies) in the pulmonary alveoli seem to lose their ability to neutralize bacteria when exposed to cannabis smoke, hence the greater susceptibility of the bronchi and lungs to bacterial infections. According to some authors, in theory, a cannabis cigarette could cause as much damage as 4 to 10 tobacco cigarettes.³⁹ This data on the reduced ability of alveolar macrophages to destroy bacteria also suggests that cannabis could have an immunosuppressive action that decreases the ability of the organism, here the lungs, to fight carcinogenic cells.

The work of Tashkin in particular, but also of other researchers, is not as confirmatory on the effects of cannabis on the respiratory tract. Thus a recent study by Tashkin on heavy cannabis smokers showed that there was no decrease in the forced expiratory volume in one second to vital capacity ratio, even for those who smoked 3 joints a day, compared to tobacco smokers who registered a significant decrease.⁴⁰ Tashkin's team also questioned the development of emphysema in cannabis users and bronchiole obstruction.⁴¹ Similarly, a study by the *Kaiser Permanent Medical Care Program* revealed that daily cannabis users who did not use tobacco were hardly more likely than non-smokers (36% vs. 33%) to consult for colds, the flu and bronchitis.⁴² We also note that to date, studies are contradictory about the additivity of the effects of tobacco and cannabis.

Carcinogenic potential

With respect to the carcinogenic potential of cannabis, there is a distinction between the carcinogenic effects of cannabis smoke – a potential source of lung cancer in particular – and the mutagenic effects of THC on cells. According to the majority of authors, THC itself does not seem to be carcinogenic.⁴³ However, cannabis smoke, like tobacco smoke, does seem to be able to increase the incidence of cancerous tumors.

The work of Fliegel⁴⁴ indicates that the histological changes that are considered the precursors of carcinomata are present in chronic smokers of cannabis. This data is

³⁷ Joy, J.E. et al., (1999) *Marijuana and Medicine: Assessing the Science Base*. Washington, DC: Institute of Medicine.

³⁸ WHO (1997) *op. cit.*

³⁹ Ben Amar (at press), *op. cit.*, page 18.

⁴⁰ Tashkin, D.P. et al., (1997) "Heavy habitual marijuana smoking does not cause an accelerated decline in FEV1 with age: a longitudinal study." *American Journal of Respiratory Critical Care*, 155: 141-148.

⁴¹ See Zimmer and Morgan, *op. cit.*, page 148.

⁴² Polen, M.R. (1993) "Health care use by frequent marijuana smokers who do not smoke tobacco." *Western Journal of Medicine*, 158: 596-601.

⁴³ In particular, see the conclusions of INSERM (2001), *op. cit.*; as well as the report by Wheelock (2002) *op. cit.* for the Senate Committee.

⁴⁴ Fliegel S.E.G. et al., (1988) "Pulmonary pathology in marijuana smokers", in Chesher G. et al. (eds.), *Marijuana: An International Research Report*, National Campaign Against Drug Abuse, Monograph 7, 43-48, Canberra, Australian Government Publishing Service; and Fliegel, SEG et al., (1997) "Tracheo-bronchial histopathology in habitual smokers of cocaine, marijuana or tobacco" *Chest*, 112: 319-326.

also supported by clinical cases of cancers of the upper aerodigestive tract in young adult cannabis smokers. These cancers are types rarely observed in young subjects. Namely:

- Thirteen cases of brain and neck cancer in young adults under the age of forty, eleven of whom were daily cannabis smokers;⁴⁵
- Ten cases of cancers of the upper respiratory tract in young adults under the age of forty, seven of whom were probable regular users of cannabis;⁴⁶ and
- Two cases of carcinoma of the tongue in men between 37 and 52 years of age for whom the only common risk factor was the regular and daily use of cannabis.⁴⁷

We note first of all the small number of cases, especially when compared to the large number of cannabis users. These clinical cases also present a certain number of important limitations: none compares the prevalence of cancer with a control group or evaluates the use of cannabis in a standardized way. Interpretation is also limited by the fact that the patients also smoked tobacco and drank alcohol.

The data available seems to indicate that the consequences of chronic and intense cannabis use (several joints per day for several years) are similar to those of cigarettes in terms of carcinogenic risks for the respiratory tract as well as the mouth, the tongue and the esophagus.⁴⁸ THC is generally considered to alter the functions of certain cells, namely lymphocytes, macrophages and polymorphonuclear cells, especially in *in vitro* models. However conducting controlled studies is largely recognized as a research priority in this field.⁴⁹

Consequences for the immune system

Apart from the possible consequences for the respiratory tract defense system essentially caused by smoke, there is no conclusive data regarding the effects of cannabis on the immune system. Some studies on rodents show that high levels of cannabinoids, including THC, alter cellular immunity. In some cases, the experimental activity of cannabinoids is immunosuppressive and in others it is stimulating. These

⁴⁵ Donald P.J. (1991) "Marijuana and upper aerodigestive tract malignancy in young patients", in Nahas, G. and C. Latour (eds.), *Physiopathology of Illicit Drugs: Cannabis, Cocaine, Opiates*, 39-54, Oxford; and (1991) "Advanced malignancy in the young marijuana smoker", in Friedman, H. et al., (eds.), *Drugs of Abuse, Immunity and Immunodeficiency*, 33-36, London.

⁴⁶ Taylor, F.M. (1988) "Marijuana as a potential respiratory tract carcinogen: A retrospective analysis of a community hospital population", *Southern Medical Journal* 81: 1213-1216.

⁴⁷ Caplan, G.A. and B.A. Brigham (1990) "Marijuana smoking and carcinoma of the tongue: Is there an association?" *Cancer* 66: 1005-1006.

⁴⁸ MacPhee, D., (1999) "Effects of marijuana on cell nuclei", in Kalant, H. et al. (eds.), *The Health Effects of Cannabis*, Toronto: Addiction Research Foundation.

⁴⁹ In particular WHO (1997), *op. cit.*; Hall, W. and N. Solowij (1998) "Adverse effects of cannabis" *The Lancet*, 352, no. 9140, page 6; INSERM (2001), *op. cit.*

variations depend on experimental factors such as the concentration of the substance, the time and duration of administration, and the type of cell function studied. Very little work has been done on humans. According to the WHO report, if it is clear that cannabinoids have immunomodulating effects, it is also clear that the immune system is resistant to this substance. Several of the effects are relatively minimal and completely reversible, and are only experienced at higher doses than those required for the drug's psychoactive effect in humans. Lastly, still according to the WHO report, even with respect to the immunomodulating effects of cannabis smoke, the studies are not conclusive and it is hard to compare the doses used in experiments with animals to the doses used by humans. The report concludes that rigorous studies on this question are necessary.⁵⁰

Consequences for the endocrine system and reproduction

Endocrine abnormalities are well documented in animals. In the male rat, decreased testosterone secretion with testicular atrophy, impaired production, mobility and viability of sperm, and changes in sexual behaviour have been noted with high doses. The ovulatory cycle of the female is altered. In humans, the results are contradictory, in particular because findings are not constant from one study to another, but also because similar changes occur following the absorption of prescription drugs. Furthermore, the changes observed are often borderline normal and their clinical consequences remain controversial.⁵¹

With respect to reproduction, the fact that the active ingredients in cannabis cross the placental barrier is well established. Nevertheless, the question of the potential effects of cannabis on the fetus is far from resolved, especially since the studies are methodologically poor. Thus, when studying pregnant women who are cannabis users, the women often come from low socio-economic backgrounds – and we know that socio-economic level is a determining factor in the size and weight of babies – and it is difficult to isolate the effect of other factors, including the use of tobacco and alcohol – which we know are risk factors for premature birth, lower weight and smaller size. In fact, studies on occasional cannabis smokers do not show any significant difference with respect to non-smokers. All in all, most studies did not observe any significant differences.⁵² Nevertheless, reports from the WHO and the collective expertise of INSERM conclude that, despite methodological difficulties, there is reasonable evidence that cannabis use during pregnancy harms fetal development, in particular restricted growth and behavioural abnormalities, but that these abnormalities are rather minor.⁵³

As for the neonatal consequences of cannabis use by mothers during pregnancy, longitudinal studies on cohorts of children conducted in Ottawa since 1978 by

⁵⁰ WHO (1997), *op. cit.*, page 26.

⁵¹ INSERM (2001), *op. cit.*, page 219-220.

⁵² Wheelock, B. (2002), *op. cit.*, page 29.

⁵³ WHO (1997), *op. cit.*, page: 24; INSERM, *op. cit.*, page 237.

psychologist Peter Fried's team⁵⁴ are not conclusive. All the measurements taken reveal more similarities than differences between the children of smokers and non-smokers. And when differences are observed, they are minor and it is impossible to dissociate the effects of the various substances, tobacco and alcohol in particular. Lastly, these studies involve a small sample of children and generalizations cannot be drawn from them. Another longitudinal study, reported by INSERM, involving 636 subjects, concluded [translation] "*there is a significant relationship between behavioural problems at age 10 and prenatal exposure to cannabis.*" However the report from INSERM also notes that [translation] "*if the results from these two studies seem to converge well (...) we must remember nevertheless that the postnatal environment can play an important role in the continuation of behavioural abnormalities.*"⁵⁵

Consequences for the cardiovascular system

Chronic use of cannabis may lead to cardiovascular complications for predisposed individuals. In fact, the use of significant quantities can slow the heart rate. Also, cannabis can have similar effects to those of tobacco on heart function by increasing the muscle workload. Furthermore, some studies point out the role that the carbon monoxide found in cannabis smoke plays in the risk of cardiovascular complications.

Cognitive and psychological consequences

The main cognitive and psychological consequences of chronic cannabis use concern brain functions involved in memory and verbal and math skills; motivation; and psychiatric disorders.

Brain functions

We have seen that cannabis has acute effects on short-term memory, attention and concentration. Does chronic use eventually result in effects on cognitive function that may be irreversible? These questions first raise the question of the neurotoxicity of cannabis, defined as "*a reversible or irreversible impairment of the structure and/or functions of the central (and/or peripheral) nervous system by physical, chemical or biological agents*"⁵⁶ [translation]

According to professor Roques:

[translation] *Cannabis dependence does not result in neurotoxicity (...). Thus old results suggesting anatomical changes in the brain of chronic cannabis users, as measured by tomography, have not been confirmed by precise modern techniques of neuro-imaging. Similarly, morphological changes in the hippocampus of the rat following administration of very high doses of THC (Landfield et al., 1988) have not been repeated (Slikker et al., 1992). (...) Several studies have been devoted to the effects of*

⁵⁴ Fried, P.A. (1995) "Prenatal exposure to marijuana and tobacco during infancy, early and middle childhood: Effects and attempts at a synthesis." *Archives of Toxicology*, 17; and Fried P.A. and B. Watkinson (1999) "36- and 48-month neurobehavioral follow-up of children prenatally exposed to marijuana, cigarettes and alcohol." *Journal of Deviant Behavior and Pediatrics*. 11: 49-58.

⁵⁵ INSERM (2001) *op. cit.*, page 235.

⁵⁶ Roques, B., (1999) *op. cit.*, page 73.

*cannabis on evoked responses and on electroencephalograms of humans. Intermittent use produces reversible changes in α wave patterns in the frontal cortex, probably with respect to the state of drowsiness induced by THC. In the very long term (more than fifteen years) and with heavy daily use, δ hyperfrontality and an increase in θ frontal activity have been observed (Struve et al., 1990, 1994). The possible connection with behavioural changes and changes in neuropsychological tests is not in question, nor moreover is that which is possible with the anticonvulsive effects of THC.*⁵⁷

The results of studies reported by the collective expertise of INSERM are contradictory as some observe changes while others do not. Even when changes are observed, they are often of minor amplitude and are reversible after a period of abstinence. The INSERM report observes that studies using neuro-imaging techniques have not confirmed the neurotoxicity of cannabis in either man or baboon.⁵⁸ Therefore it is through observing functioning and behaviour that we are still best able to examine the question of the neurological effects of cannabis.

Unfortunately, studies are just as contradictory here and the results are inconclusive. Studies performed in the 1970s in countries where cannabis use is traditional (Jamaica, Costa Rica, India) did not point out any significant differences in cognitive functions of users and non-users, whereas more recent studies, in particular in Costa Rica in the 1980s, did show differences: [translation] *"In particular, long-term users recalled fewer words on a list they had been shown earlier and response time was longer."*⁵⁹ In the United States, studies conducted in the 1970s found contradictory results for memory functions, whereas more recent studies reported subtle deficits in cognitive functions of heavy users after a brief period of abstinence. Some studies also showed continued memory impairment in adolescents after six weeks of abstinence.⁶⁰

Most studies tend to show that overall, ex-users recover all cognitive functions, but depending on the length of use, subtle impairments can persist, in particular with regard to the ability to process complex information.

Still according to the collective expertise of INSERM, the age when use begins can be a determining factor. Thus, a recent study shows the persistence of some visual scanning impairments (related to attention) in young people who began to use cannabis before age 16, whereas those who began use after age 16 show no difference from non-users.⁶¹

In all, we cannot really establish that cannabis use has negative consequences for brain functions, even in chronic users, unless use begins before age 16.

Motivation

Some studies suggest the presence of an amotivational syndrome in chronic cannabis users, a syndrome that could affect the performance of young people at

⁵⁷ Roques, B., (1999) *op. cit.*, page 187.

⁵⁸ INSERM, *op. cit.*, page 206.

⁵⁹ *Ibid.*, page 204.

⁶⁰ *Ibid.*, page 205.

⁶¹ *Ibid.*, page 206.

school and employees in a professional environment in particular. In its 1997 report, the WHO pointed out that our knowledge has not advanced since its previous report in 1981: the amotivational syndrome has still not been clearly defined, its effects have still not been clearly distinguished from the effects of intoxication itself, and the data available comes from clinical case reports with no control group.⁶²

In order to evaluate the impact of cannabis on motivation, Canadian researchers developed a study where subjects received cannabis in exchange for work performed. Even though it is not recent, the study is no less interesting. They observed that subjects worked less efficiently immediately after using cannabis. However, their level of productivity then increased rapidly and exceeded levels achieved during periods of abstinence. Although working fewer hours, the subjects using cannabis were not less productive because they worked harder. Furthermore, over the course of the period of heaviest use, the subjects organized a strike and successfully negotiated a “salary” increase, after which they worked even harder.^{63 64}

Studies do not enable us to establish if motivational problems, when observed, preceded or followed cannabis use, or if other emotional or psychosocial factors played a greater role, or were even determining factors in the chronic use or abuse of cannabis in young people in particular. These conclusions are shared by the collective expertise of INSERM and by the authors of the report submitted to the International Scientific Conference on Cannabis in March 2002.⁶⁵

Psychiatric disorders

Various psychiatric disorders have been associated with chronic cannabis use: mood disorders and depressive episodes, anxiety disorders, personality disorders, as well as more severe conditions, such as psychoses and schizophrenia. For each of these situations, the conclusion drawn by the authors of the report on mental health and cannabis prepared for the International Scientific Conference on Cannabis generally applies:

There are three possible ways to account for the relationship between cannabis and mood disorders. First, both may share common risk factors, so that their relationship is not causal. Second, mood disorders may predispose people to use cannabis. Third, cannabis use may trigger or increase depressive symptoms. As yet, there is no clear answer to this question of “which comes first”.⁶⁶

⁶² WHO (1997), *op. cit.*, page 18.

⁶³ Miles G.C. et al., (1974) *An Experimental Study of the Effects of Daily Cannabis Smoking on Behavioural Patterns*, Toronto: Addiction Research Foundation, Toronto.

⁶⁴ Campbell, I. (1976) *The Amotivational Syndrome and Cannabis Use With Emphasis on the Canadian Scene*, Annals of the New York Academy of Sciences 282, 33-36.

⁶⁵ INSERM, *op. cit.*; Hanak, C. et al., (2002) “Cannabis, mental health and dependence”, Pelc, I. (ed.), *International Scientific Conference on Cannabis*, *op. cit.*, page 61.

⁶⁶ Hanak, C. et al. (2002), *op. cit.*, page 62.

Specifically with regard to mood disorders, depressive states and anxiety disorders, it seems probable that they precede chronic use. However, study results are extremely disparate: for mood disorders in so-called dependent people, the prevalence varies (depending on study methods), from 10% to almost 50%; with respect to major depressive episodes in clinical populations, studies report percentages varying from 4% to almost 20%. INSERM's report presents a review that we feel is much more enlightening with regard to the situation for adolescents:

*[Translation] Acquiring new knowledge has allowed for a better assessment of the burden of "early onset depression" in terms of individual suffering and public health. Its prevalence, around 5% in adolescence, makes it one of the most common pathologies for this period. The risk of suicide is high, and the functional deficits inherent in depressive syndromes are a source of school and family problems, and cause withdrawal from peers, for which the psychosocial consequences can be severe, especially if the disorder is prolonged. Additionally, depression is rarely an isolated disorder in a young subject: anxiety or behavioural disorders often precede or accompany depressive episodes and can survive them; moreover, the existence of a depressive disorder is a risk factor for addiction (alcohol or any other psychoactive substance) and eating disorders.*⁶⁷

With respect to psychotic disorders and schizophrenia, the two subjects are controversial, the methodologies weak, the data contradictory and the interpretations are often based on simplistic models of causality. If, in certain circumstances, cannabis can trigger psychotic episodes, they are most often short and resolve rapidly. As for schizophrenia, if it is true that cannabis use is more prevalent in these subjects than in the general population, some feel that it is self-medicating behaviour while others feel that the chronic use of cannabis is a trigger for the schizophrenic process. We feel that the conclusion of professor Roques' report agrees best with current data:

*[Translation] No mental pathology directly related to the overuse of cannabis has been reported, which distinguishes this substance from psychostimulants such as MDMA, cocaine or alcohol, heavy and repeated use of which can give rise to characteristic psychotic syndromes. Similarly, cannabis does not seem to precipitate the onset of pre-existing mental dysfunctions (schizophrenia, bipolar depression, etc.).*⁶⁸

As it is, most scientific reports come to the same conclusion: more research is needed, with more rigorous protocols, allowing in particular for comparison with other populations and other substances.

Behavioural and social consequences

The main behavioural and social consequences examined in scientific literature deal with social and family adjustment, aggression, and the ability to perform complex tasks.

⁶⁷ INSERM (2001), *op. cit.*, page 98.

⁶⁸ Roques, B., (1999) *op. cit.*, page 186.

Social and family adjustment

According to some studies, chronic cannabis use could have consequences for social and family adjustment. Thus chronic users would have more difficulty keeping a job, would be unemployed more often and would have more interpersonal adjustment problems.⁶⁹

However, most of these studies suffer from methodological problems and interpretation difficulties. Most studies involve samples of people who, by and large, come from underprivileged socio-economic backgrounds. Above all, beyond the statistical association, it is difficult to determine to what extent other factors play a preponderant role, of which cannabis is itself a symptom and not a cause.

Aggression

Unlike other psychoactive substances, alcohol and cocaine in particular, cannabis does not lead to aggression. When examining withdrawal symptoms once dependence is established, some authors note greater irritability; but this is even less significant proportionally than that caused by tobacco.

Performing complex tasks

No study on chronic cannabis use has been able to establish that cannabis causes long-term effects on the ability to perform complex tasks. This data is in keeping with cannabis' lack of neurotoxicity.

TOLERANCE AND DEPENDENCE

When we think drugs we think drug addiction since, as F. Caballero states, a drug is [translation] “*any substance likely to lead to addiction*”.⁷⁰ In France and Europe, monitoring groups created in recent years are called monitoring centres for drugs and drug addiction. In Quebec, the advisory body created by the government is called the “*Comité permanent de lutte à la toxicomanie*” [standing committee on the fight against drug addiction]. The expression “drug addiction” is found everywhere: in legislation, in information documents, and in everyday language. However, since 1963, the WHO has recommended that we abandon this expression because it is imprecise and refer instead to states of physical and psychic dependence, defined as follows:

Psychic dependence is a “condition in which a drug produces a feeling of satisfaction and a psychic drive that requires periodic or continuous administration of the drug to produce pleasure or to avoid discomfort. Physical dependence is an “adaptive state that manifests itself by intense physical disturbance when the administration of the drug is suspended or its action is opposed by a specific antagonist. These

⁶⁹ INSERM, (2001) *op. cit.*, pages 206-207.

⁷⁰ Caballero, F. and Y. Bisiou (2000) *Droit de la drogue*. Paris, Dalloz, 2nd edition, page 3.

*disturbances, that is the abstinence or withdrawal symptoms, consist of physical and psychic symptoms and signs that are characteristic for each drug.*⁷¹[translation]

Furthermore, with the extension of the notion of drugs to other substances (pharmaceutical products, tobacco, alcohol), and with the extension of international control of substances to psychotropic drugs, in 1969 the WHO created a new definition for the term drug dependence that, though its application was initially limited to medication only, has come to be more widely accepted over time:

*Drug dependence. A state, psychic and sometimes also physical, resulting from the interaction between a living organism and a drug, characterized by behavioural and other responses that always include a compulsion to take the drug on a continuous or periodic basis in order to experience its psychic effects, and sometimes to avoid the discomfort of its absence. Tolerance may or may not be present. A person may be dependent on more than one drug.*⁷²

But it is even more interesting for our purposes to quote even older definitions from the WHO dealing with habituation and addiction:

Drug habituation (habit) is a condition resulting from the repeated consumption of a drug. Its characteristics include:

- 1. A desire (but not a compulsion) to continue taking the drug for the sense of improved well-being which it engenders;*
- 2. Little or no tendency to increase the dose;*
- 3. Some degree of psychic dependence on the effect of the drug, but absence of physical dependence and hence of an abstinence syndrome;*
- 4. Detrimental effects, if any, primarily on the individual.*

Drug addiction is a state of periodic or chronic intoxication produced by the repeated consumption of a drug (natural or synthetic). Its characteristics include:

- 1. An overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means;*
- 2. A tendency to increase the dose;*
- 3. A psychic (psychological) and generally a physical dependence on the effects of the drug;*
- 4. Detrimental effect on the individual and on society.*⁷³

This definition is important because, more than the previous two, it allows us to better distinguish between drugs that create primarily a habit and those that create an addiction, that is, the overwhelming need to use them. Now, as we will see in this

⁷¹ WHO (1964) *Expert Committee on Addiction-Producing Drugs*, Technical Report Series, no. 273, quoted in Caballero and Bisiou, *op. cit.*, page 5-6.

⁷² WHO (1969) *Expert Committee on Drug Dependence*, Technical Report Series, no. 407, quoted in Caballero and Bisiou, (2000), *op. cit.*, page 6.

⁷³ WHO (1952) *Expert Committee on Drugs Liable to Produce Addiction*, Technical Report Series, no 57, quoted in Caballero and Bisiou (2000), *op. cit.*, page 4-5.

chapter, cannabis corresponds much more to the criteria of a substance likely to create some degree of habituation and not an addiction.

In addition to drug addiction, thinking about drugs means also thinking about illicit substances. Now, as a wide range of works and an increasing number of practices have established, for practical purposes, the actual distinction is made on the combined levels of the substance's toxicity (its dangers) and the uses (use, abuse, heavy use) that characterize it, not on the level of its legal and symbolic status.

Cannabis dependence

Let us first establish that animal studies on dependence and withdrawal are not very pertinent since most of them use doses that have nothing in common with the doses used by humans, even chronic users. Moreover, we note that studies on naïve animals (no experience with other drugs) have not been able to establish self-administering behaviour and that is the only technique that allows for the direct assessment of the reinforcing properties of a molecule. One of the probable explanations stems from the long plasma half-life of Δ^9 THC, which we know is eliminated slowly by an organism (up to 25 days as we saw in the Chapter 5).⁷⁴ We also note that even after administration of very high doses of Δ^9 THC, somatic signs of spontaneous withdrawal were not observed in rodents, pigeons, dogs or monkeys.⁷⁵ Lastly, we note that all in all, we know little about the biophysiological and psychological mechanisms of dependence.

The idea of cannabis dependence has been the subject of criticism due to its overly medical aspect (having little regard for the differences in social context of the ways and situations in which it is used) and circular reasoning (for example, the fact that drugs are illegal means that their use is necessarily illegal, yet this is one of the criteria for dependence).⁷⁶ Nevertheless, when measured in accordance with the criteria of the DSM, a cannabis dependence syndrome presents no differences from an alcohol or heroin dependence syndrome. Furthermore, establishing the relative dangers of cannabis is not contrary to the objectives of public health.

The nosologic criteria of the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders*) of the *American Psychiatric Association* undoubtedly remain the most widely used in studies on dependence, especially since the majority of drug research is conducted in the United States and Commonwealth countries (England, Australia, Canada...) that use this instrument.

⁷⁴ INSERM, (2001), *op. cit.*, pages 274-275.

⁷⁵ *Ibid.*, page 270.

⁷⁶ Cohen, P. testimony before the Senate Committee; also Alexander B.K., professor, Department of Psychology, University Simon Fraser, testimony before the Senate Committee on Illegal Drugs, Senate of Canada, First Session of the Thirty-Seventh Parliament, April 23, 2001, Issue 1.

The DSM-IV distinguishes between criteria for substance abuse and criteria for dependence. We have reprinted them here in accordance with the INSERM report.

Diagnostic Criteria for Substance Abuse according to the DSM-IV

- A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:
1. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home;
 2. Recurrent substance use in situations in which it is physically hazardous;
 3. Recurrent substance-related legal problems;
 4. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.
- B. The symptoms have never met the criteria for Substance Dependence for this class of substance.

Diagnostic Criteria for Substance Dependence according to the DSM-IV

- A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:
1. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of the substance to achieve intoxication or desired effect;
 - b. Markedly diminished effect with continued use of the same amount of the substance.
 2. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for the substance;
 - b. The same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms.
 3. The substance is often taken in larger amounts or over a longer period than was intended;
 4. There is a persistent desire or unsuccessful efforts to cut down or control substance use;
 5. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects;
 6. Important social, occupational, or recreational activities are given up or reduced because of substance use;
 7. The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

The existence of a cannabis dependence syndrome in humans can be inferred using various methods: epidemiological investigations and clinical studies (which usually use DSM criteria), and requests for treatment.

Epidemiological investigations

Some epidemiological studies show that cannabis use can lead to psychological dependence. In some cases, they estimate that half of chronic users would develop this kind of dependence.⁷⁷ People who use cannabis on a daily basis for several months would be at greater risk of becoming dependent.⁷⁸ Interpretation and intercomparison of the various studies is difficult because the denominator is not always common, or even specified (in some cases, it is the general population while in others it is cannabis users and in the latter case, there is not always a distinction among life-long, recent and regular users). The authors also do not always specify if the dependence is recent or life-long.

In the United States, several investigations were conducted into the frequency of use of various psychoactive substances and dependence. Through the *Epidemiological Catchment Area* study, close to 20 000 people were interviewed in five years during the 1980s. The prevalence (in the general population) of cannabis dependence was 4.4%.⁷⁹ The *National Comorbidity Survey*, an investigation to estimate the comorbidity between substance abuse and other mental disorders, undertaken between 1990 and 1992 and involving more than 8,000 subjects from the general population between the ages of 15 and 55, also estimated the prevalence of dependence. For the purposes of the investigation, DSM criteria were used and dependence was observed when respondents presented at least three of the nine criteria. According to this study, 4.2% of the 15-54 year olds presented cannabis dependence (14% were dependent on alcohol and 24% on tobacco). Of those who had used cannabis at least once during their life (46%), 9% were considered dependent, compared to 32% for tobacco and 15% for alcohol. Cannabis dependence was more common in men than women (12% versus 5.5% of users), and in those 15-24 than in the others (15% versus 8%).⁸⁰ Combining the results of three large investigations into the use of psychoactive substances conducted on households (nearly 88,000 respondents aged 12 and up) Kandel et al.⁸¹ observed that 8% of those who had used cannabis in the previous year (0.7% of the sample) were considered dependent.

⁷⁷ WHO (1997) *op. cit.*

⁷⁸ Channabasavanna, M. et al., (1999) "Mental and behavioural disorders due to cannabis use", in Kalant H. et al. (eds.), *The Health Effects of Cannabis*, Toronto: CAMH.

⁷⁹ Anthony J.C. and J.E. Helzer (1991) "Syndromes of drug abuse and dependence", in Robins L.N. and D.A. Regier (eds.), *Psychiatric Disorders in America*, New York, Free Press, pages: 116-154.

⁸⁰ Anthony, J.C. et al., (1994) "Comparative epidemiology of dependence on tobacco, alcohol, controlled substances and inhalants: basic findings from the National Comorbidity Survey." *Experimental and Clinical Psychopharmacology*, 2: 244-268.

⁸¹ Kandel, D. et al. (1997) "Prevalence and demographic correlates of symptoms of last year dependence on alcohol, nicotine, marijuana and cocaine in the US population." *Drugs, Alcohol and Dependency*, 44: 11-29. See also Kandel D. and M. Davies, (1992) "Progression to regular marijuana involvement: Phenomenology and risk factors for near daily use", in M. Glantz and R. Pickens (eds.), *Vulnerability to Drug Abuse*, 211-253, Washington DC, American Psychological Association.

In New Zealand, a longitudinal study involving a cohort of 1,265 children born in 1977 in an urban setting and followed since birth revealed that at age 21, not less than 70% had used cannabis. Of those, 13% had had a problem with dependence measured in accordance with the DSM-IV during their lifetime.⁸² Another New Zealand study involving a cohort of 1,000 people found similar results: at age 21, 62% had used cannabis and at age 26, 70% had. The prevalence of dependence using DSM III-R criteria went from 3.6% at age 18 to 9.6% at age 21 (or nearly 15% of users).⁸³

In Australia, an investigation involving more than 10,000 people from the general population who were over 18 years of age showed that approximately 1.5% of users during the previous year and 20% of current users showed signs of dependence based on the DSM-IV.⁸⁴

In the Netherlands, a study involving a sample of the national population aged 18 to 65 (7,000 subjects) showed that 10% of users had had signs of dependence during their lifetime.⁸⁵

Clinical studies

It is difficult to generalize based on the results of clinical studies, but it is interesting to see to what extent their results are similar to those of epidemiologic studies. Kosten examined the validity of DSM-III R criteria to identify syndromes of dependence on various psychoactive substances including cannabis. He observed that the criteria for syndromes of alcohol, cocaine and opioid dependence were strongly consistent. The results were more ambiguous for cannabis. A criterion-referenced analysis revealed that there were three dimensions to the cannabis dependence syndrome: (1) compulsion – indicated by a change in social activities attributable to the drug; (2) difficulty stopping – revealed by the inability to reduce use, a return to previous levels after stopping temporarily and a degree of tolerance of the effects; and (3) withdrawal signs – revealed by their disappearance with re-use and continuing use despite recognized difficulties.⁸⁶

Studies on long-term users

In Canada, Hathaway conducted a study between October 2000 and April 2001 to identify problem use and dependence in long-term users based on the DSM-IV criteria.⁸⁷ The sample was made of 104 individuals (64 men and 40 women) aged 18 to

⁸² Fergusson, D.M. and L.J. Horwood (2000) "Cannabis use and dependence in a New Zealand birth cohort." *New Zealand Medical Journal*, 113: 156-158

⁸³ Poulton, R., et al., (2001) "Persistence and perceived consequences of cannabis use and dependence among young adults: implications for policy." *New Zealand Medical Journal*, 114: 13-16.

⁸⁴ Swift, W. et al., (2001) "Cannabis use and dependence among Australian adults: results from the National Survey of Mental Health and Well-being." *Addiction*, 96: 737-748.

⁸⁵ Van Laar, M., et al., (2001) *National Drug Monitor. Jaarbericht 2001*. Utrecht: NDM Bureau.

⁸⁶ T.R. Kosten et al., Substance-use disorders in DSM-III-R, *British Journal of Psychiatry*, 151, 8-19, 1987.

⁸⁷ Hathaway, A.D. (2001) "Cannabis effects and dependency concerns in long-term frequent users: a missing piece of the public health puzzle." Transmitted to the Senate Committee on Illegal Drugs

55 (mean age 34). 80% had used cannabis on a weekly basis, 51% on a daily basis during the preceding 12 months, and close to half (49%) had used one ounce (28 grams) or more per month. Reasons to use included: to relax (89%), to feel good (81%), to enjoy music or films (72%), because they are bored (64%) or as a source of inspiration (60%).

Respondents were asked if they had ever engaged in deviant activity related to cannabis use. The most frequent answer was to have been in an uncomfortable situation in order to get cannabis. Other activities included borrowing money, selling cannabis to support their own drug use, and taking on extra work to buy cannabis. Only 6% ever had recurring legal problems due to their use of cannabis. With respect to dependence, 30% reported a lifetime prevalence of three or more of the criteria, 15% during the 12 months prior to the interview.

In light of this finding, the most frequently encountered problems with cannabis have more to do with self-perceptions of excessive use levels than with the drug's perceived impact on health, social obligations and relationships, or other activities. Lending support to the highly subjective nature of his evaluative process, no significant correlations were found between amounts nor frequency of use and the number of reported DSM-IC items. For those whom cannabis dependency problems progress to the point of seeking out or considering formal help, however, the substantive significance of perceived excessive use levels cannot be overlooked.⁸⁸

The comparative study by Cohen and Kaal presented in the previous chapter also included data on dependency symptoms. Between 21% and 24% of the subjects presented 3 or more DSM-IV criteria in their lifetime as the following table shows.

Number of criteria	Number of positive DSM IV answers							
	Amsterdam, San Francisco, Bremen ⁸⁹							
	Ever experienced				Last twelve months			
	Amsterdam		San Francisco		San Francisco		Bremen	
	N	%	N	%	N	%	N	%
0	85	39	129	49	233	88	43	78
1	37	17	53	20	17	6	5	9
2	43	20	30	11	9	3	4	7
3	19	9	28	11	3	1	2	4
4	15	7	15	6	3	1	1	2
5	9	4	7	3				
6	8	4	3	1				

during the testimony of Professor Hathaway before the Senate Special Committee on Illegal Drugs, Senate of Canada, First session of the thirty-seventh Parliament, May 14, 2001, Issue 2.

⁸⁸ *Ibid.*, page 15.

⁸⁹ Cohen, P.D.A. et H.L. Kaal, (2001) *The irrelevance of drug policy. Patterns and careers of experienced cannabis use in the population of Amsterdam, San Francisco and Bremen*. Amsterdam: University of Amsterdam, CEDRO, page 99.

Total	216	100	265	100	265	100	55	100
Average incl. 0	1,5		1,2		0,2		0,4	
Average excl. 0	2,5		2,3		1,8		1,9	

The authors observe a significant correlation between amount of cannabis use (in grams) during top period of use and the number of DSM-IV items ever experienced. However, no correlation was found between the amount of cannabis use during top period of use and number of criteria experiences in the last twelve months.

Requests for treatment

Lastly, we can examine dependence indirectly through requests for treatment. Obviously, this is a very indirect and definitely very imperfect means for several reasons. The very great majority of cannabis users use it irregularly and stop when they reach their twenties. Of those who continue and become regular users, we have just seen that between 10% and 20% will present the criteria for dependence. Most users do not think they need help, which their ability to stop without outside assistance would confirm. Lastly, those who ask for help could be influenced simultaneously by the availability of services as well as the interaction of other problem substances, alcohol, medication or other drugs, or other mental disorders. In fact, it seems that in a significant proportion of cases, requests for treatment related to cannabis come from people with multiple disorders.

Nevertheless, we have heard testimony to the effect that requests for treatment for problems with cannabis dependence are on the rise and that this increase could be related to the THC content.

In Europe, requests for treatment where the main problem is cannabis-related vary widely from country to country, ranging from 6% in Spain (one of the countries where use is most widespread and most tolerated) to 25% in Belgium. Sweden, which however has a relatively low rate of use, is at 14%, comparable to France (16%) which, however, has a much higher rate of use. In the United States, demand is just as variable depending on the state, from 5% to 30%.⁹⁰

Severity of dependence

Severity of dependence has been evaluated in different ways. In the United States, a study examined approximately 1,100 subjects who had used cannabis more than six times and evaluated the severity of their dependence based on DSM-IV criteria. The level of dependence (low, intermediate or high) corresponded to the number of criteria met.⁹¹ The following results were obtained:

Severity of cannabis dependence based on use ⁹²												
Dependence (number of criteria)	Distribution of subjects based on type of use											
	Low			Intermediate			Heavy			Total		
	T	A	C	T	A	C	T	A	C	T	A	C
Nil (0-2)	18	88	85	14	45	53	5	8	35	13	47	59
Low (3-4)	28	8	11	30	22	21	22	12	34	27	14	18
Moderate (5-6)	34	3	2	39	15	14	51	19	23	40	12	13
Severe (7-9)	19	1	3	17	17	12	23	61	17	20	27	10

T = tobacco; A = alcohol; C = cannabis

We see a consistent situation in which the link between heavy use and dependence is lower for cannabis than for tobacco and alcohol, and in which, over all, dependence on cannabis is the lowest of the three substances.

For his part, professor Roques proposes three classes of products based on their dangers. The first includes heroin, cocaine and alcohol; the second psychostimulants, hallucinogens, tobacco and benzodiazepines; and cannabis is set apart in a separate class. He classifies the dangerousness of drugs using a diverse set of criteria. We have reprinted his table of the dangerousness of drugs on the following page.

⁹⁰ Rigter, H. and M. van Laar (2002) "Epidemiological aspects of cannabis use." in Pelc I., (ed.) *International Scientific Conference on Cannabis*. Brussels.

⁹¹ Woody G.E. et al., (1993) "Severity of dependence: Data from the DSM-IV field trials" *Addiction* 88, 1573-1579.

⁹² Reprinted from INSERM (2001) *op. cit.*, page 73.

Danger Factors of "drugs" (reprinted from Roques, B. (1999), page: 296

	Heroin	Cocaine	MDMA	Psycho-stimulants	Alcohol	Benzo-diazepines	Cannabi-noids	Tobacco
Dopamine Overactivation	+++	+++	+++	++++	+	±	+	+
Hypersensitivity to Dopamine	++	+++	?	+++	±	?	±	?
Activation of Opioid System	++++	++	?	+	++	+	±	±
Physical Dependence	very high	low	very low	low	very high	average	low	high
Psychic Dependence	very high	high but intermittent	?	average	very high	high	low	very high
Neurotoxicity	low	high	very high (?)	high	high	0	0	0
General Toxicity	high	high	possibly very high	high	high	very low	very low	very high (cancer)
Danger to Society	very high	very high	low (?)	low (exceptions)	high	low	low	0
Replacement Therapy	yes	yes	no	no	yes	not researched	not researched	yes

In closing, we note that there is no known physical dependence on cannabis, even though in the most severe cases, withdrawal is sometimes accompanied by physical signs such as trembling, insomnia, irritability, etc.

Tolerance

From a technical standpoint, tolerance is defined as follows:

*the property of the human organism to endure the administration of usually effective doses of a given substance without displaying a reaction. With respect to drugs, this tolerance can lead to increased doses in order to achieve the desired effect.*⁹³ [translation]

Development of tolerance is associated with pharmacodynamic changes. In some animal studies, chronic administration of THC reduced the density of receptors in some regions of the brain⁹⁴ and increased it in others; these effects were reversible.⁹⁵

In man as in animals, studies have observed the phenomenon of cannabis tolerance. However, the data must be interpreted with care insofar as some studies and clinical cases have also found that regular users needed less cannabis to achieve the desired effect.⁹⁶ Nevertheless, a study by Wiesbeck et al. involving 5,611 subjects reported that 16% of frequent cannabis users had a history of a withdrawal syndrome.⁹⁷

It is tolerance of a substance that leads to withdrawal symptoms. In recent years, clinical data has been accumulated on withdrawal symptoms in heavy cannabis users (several doses per day in an ongoing manner for several years). The symptoms observed include agitation, loss of appetite, nausea, disturbed sleep, irritability or hyperactivity and an increased body temperature.⁹⁸ These symptoms appeared after 24 hours of abstinence, peaked after two to four days and diminished within seven days. The symptoms were markedly less severe and of shorter duration than with other psychoactive substances. Furthermore, clinical studies showed that most subjects continued to perform their daily activities in a normal fashion.

⁹³ OMS (1969), in Caballero et Bisiou (2000), *op. cit.*, page 6.

⁹⁴ Rodriguez de Fonseca, F. et al., (1994) "Downregulation of rat brain cannabinol binding sites after chronic delta-9-THC treatment", *Pharm. Biochem. Behav.* 47, 33-40.

⁹⁵ Westlake, T.M. et al., (1996) "Chronic exposure to delta-9-THC fails to irreversibly alter brain cannabinoid receptors" *Brain Research*, 544, 145-149.

⁹⁶ Beardsley, R.M et al., (1986) "Dependence on THC in rhesus monkeys", *Journal Pharmacol. Exp. Ther.*, 239 (2), 311-319.

⁹⁷ Wiesbeck, G.A., et al., (1996) "An evaluation of the history of a marijuana withdrawal syndrome in a large population." *Addiction*, 91 (10): 1573-1579.

⁹⁸ Kouri, E.M. et al., (2000) "Abstinence symptoms during withdrawal from chronic marijuana use." *Experimental and Clinical Psychopharmacology*, 8: 483-492.

To summarize

In Chapter 6, we have seen that use does not follow a single pattern, even less so a pattern inevitably leading to increased use. Even in chronic users, the use of cannabis is sometimes irregular and involves periods of abstinence and of more intensive use. We have also seen that current epidemiological studies are not sensitive enough to the complex interactions between the multiple factors that influence patterns of use. These various difficulties make it more difficult to estimate the number of problem users, even more so the number of persons who may become dependent.

In our view, it is clear that the term addiction, severely criticized for its medical and moral overtones, is inadequate to properly describe the different forms of at-risk and problem uses. It is even less useful when it comes to cannabis, whose addictive potential is low. It is therefore of limited use to inform public policies aiming to prevent at-risk and problem use and to assist excessive users. Further, we are of the view that dependency is but one of the many consequences of excessive use of cannabis and that this possibility must not be overestimated.

For these reasons, we propose to distinguish between different uses on the basis of four criteria: context, quantity, frequency, and duration and intensity.

Proposed Criteria for Differentiating Use Types

	Environment	Quantity	Frequency	Period of use and intensity
Experimental / Occasional	Curiosity	Variable	A few times over lifetime	None
Regular	Recreational, social Mainly in evening Mainly in a group	A few joints Less than one gram per month	A few times per month	Spread over several years but rarely intensive
At-risk	Recreational and occupational (to go to school, to go to work, for sport...) Alone, in the morning Under 16 years of age	Between 0.1 and 1 gram per day	A few times per week, evenings, especially weekends	Spread over several years with high intensity periods
Excessive	Occupational and personal problems No self regulation of use	Over one gram per day	More than once per day	Spread over several years with several months at a time of high intensity use

Given the poor knowledge base on use patterns in Canada, we have no choice but to speculate on the number of persons falling in each of these types of uses. We propose the following broad parameters:

- ❖ In adults: we have estimated that approximately 100,000 persons over 18 would use cannabis daily.
 - If 30% to 40% use between 0.1 to 1 gram per day, this means that 30,000 to 40,000 may be at-risk;
 - If 5% to 10% use more than 1 gram per day, this means that 5,000 to 10,000 adults have excessive use patterns.
- ❖ In youth 12 to 17, we have estimated that as many as 225,000 use cannabis daily.
 - If it is agreed that any use below the age of 16 is excessive use, and that youths 12-15 who use cannabis may represent approximately 25% of this group, then about 50,000 may use excessively;
 - Of the remaining 175,000, if 30% to 40% use 0.1 to 1 gram per day, approximately 50,000 to 70,000 would be at-risk;
 - If 5% to 10% of the remaining 175,000 use more than 1 gram per day, then approximately 8,000 to 17,000 use excessively.

We are aware that these estimates do not account other variables, such as context and duration of use. We can only hope that future epidemiological studies, which must be undertaken regularly, will help further explain the complexity and variability of these uses.

CONCLUSIONS

In total, based on all the data from the research and the testimony heard regarding the effects and consequences of cannabis use, **the Committee concludes that the state of knowledge supports the belief that, for the vast majority of recreational users, cannabis use presents no harmful consequences for physical, psychological or social well-being in either the short or the long term.**

More specifically, this conclusion is based on the following conclusions.

	Conclusions of Chapter 7
Acute effects of cannabis	<ul style="list-style-type: none"> ➤ The immediate effects of cannabis are characterized by feelings of euphoria, relaxation and sociability; they are accompanied by impairment of short-term memory, concentration and some psychomotor skills.
Distinctions between uses	<ul style="list-style-type: none"> ➤ For purposes of public policy, the Committee does not feel that the traditional distinctions between acute and chronic effects are useful. ➤ Similarly, the Committee does not feel the dichotomy of use and dependence is useful. ➤ The research data does not allow for a clear distinction between use, at-risk use and heavy use. ➤ The amount consumed is an indicator, but other factors, psychosocial factors and factors relating to the context of use and the quality of the substance, are equally determining in the passage from use to at-risk use and heavy use.
At-risk use and heavy use in adults	<ul style="list-style-type: none"> ➤ Nevertheless, the Committee feels that for people over the age of 16, at-risk use lies within the range of 0.1 to 1 gram per day; anything more than that is heavy use, which can have negative consequences on the physical, psychological and social well-being of the user. ➤ According to this distinction, and in accordance with the epidemiological data available, there is reason to believe that approximately 100,000 Canadians could be at-risk users and approximately 80,000 could be heavy users.
Any use in those under age 16 is high-risk use	<ul style="list-style-type: none"> ➤ The Committee feels that, because of its potential effects on the endogenous cannabinoid system and cognitive and psychosocial functions, any use in those under age 16 is at-risk use; ➤ Our estimation would suggest that approximately 50,000 youths fall in this category. ➤ For those between the ages of 16 and 18, heavy use is not necessarily daily use but use in the morning, alone or during school activities;
Consequences of heavy use	<ul style="list-style-type: none"> ➤ Heavy use of smoked cannabis can have certain negative consequences for physical health, in particular for the respiratory system (chronic bronchitis, cancer of the upper respiratory tract). ➤ Heavy use of cannabis can result in negative psychological consequences for users, in particular impaired concentration and learning and, in rare cases and with people already predisposed, psychotic and schizophrenic episodes.

-
- Heavy use of cannabis can result in consequences for a user's social well-being, in particular their occupational and social situation and their ability to perform tasks.
 - Heavy use of cannabis can result in dependence requiring treatment; however, dependence caused by cannabis is less severe and less frequent than dependence on other psychotropic substances, including alcohol and tobacco.
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CHAPTER 8

DRIVING UNDER THE INFLUENCE OF CANNABIS¹

Stan Thompson was 18 when he and four other teenagers from Kanata were killed in a horrific car accident near Perth that summer day. A youth was found responsible for the fatal accident and served eight months of a 12-month sentence. Cannabis and alcohol-impaired driving was the cause. ... The year following Stan's death, his father, Greg Thompson, went to local high schools to talk about the tragedy. He spoke to students about what went wrong and how the tragedy could have been prevented. ... His message was that driving a vehicle and smoking marijuana does and will affect driving abilities. He pleaded with the kids not to do it. ... Cannabis is not a benign substance. There is very little in the way of research that allows anyone to determine levels of impairment related to cannabis and driving ability, much less the levels of impairment related to cannabis and alcohol and driving ability. We have seen in the Manitoba survey, over one-half of the kids that are using cannabis do so in cars and during school hours. There is no technical or scientific ability to test for cannabis impairment. We do not have the technology, scientific data or the research. We do not have the proper legislation. Studies done in British Columbia indicate that 12 per cent to 14 per cent of the drivers involved fatal motor vehicle accidents had cannabis in their systems. The Government of Quebec and the insurance board in Quebec are presently doing road surveys where people are voluntarily submitting to urine or blood tests. The findings in these tests are that between 12 per cent and 14 per cent of those drivers has cannabis in their system while driving.²

If there is one issue, other than the effects of cannabis use on young people or the effects of substance abuse, that is likely to be of concern to society and governments, then it is certainly the issue of how it affects the ability to drive a vehicle. We are already familiar with the effects of alcohol on driving, and the many accidents involving injuries or deaths to young people. In spite of the decreases in use noted in recent years, it is not difficult to admit that one fatal accident caused by the use of a substance is already one accident too many.

¹ In addition to the specific studies we consulted, which will be referred to appropriately, this chapter is largely based on the surveys carried out by INSERM (2001) *op. cit.*, Ramaekers et al., for the International Science Conference on Cannabis in Pelc, I., *op. cit.*, and Smiley (1999) in Kalant (ed.) *op. cit.*

² R.G. Lesser, Chief Superintendent, Royal Canadian Mounted Police, testifying before the Special Senate Committee on Illegal Drugs, October 29, 2001, Issue 8, page 17.

As it happens, after alcohol, cannabis is the most widely used psychoactive substance, particularly among young people in the 16-25 age group. Casual use occurs most often in a festive setting, at weekend parties, often also accompanied by alcohol. People in this age group are also the most likely to have a car accident and are also susceptible to having an accident while impaired.

We have seen that cannabis affects psychomotor skills for up to five hours after use. The psychoactive effects of cannabis are also dependent on the amount used, the concentration of THC and the morphology, experience and expectations of users. But what are the specific effects of cannabis on the ability to drive motor vehicles? What are the effects of alcohol and cannabis combined? And what tools are available to detect the presence of a concentration of THC that is likely to significantly affect the psychomotor skills involved in vehicle operation?

Here again, the witnesses heard by the Committee vary in their interpretation of the study results. Thus, the Canadian Police Association told us:

*Driving while intoxicated by drugs impairs judgment and motor coordination. In one study involving aircraft 10 licensed pilots were given one marijuana joint containing 19 milligrams of THC - a relatively small amount. Twenty-four hours after smoking the joint, they were tested in a flight simulator. All 10 of the pilots made errors in landing and one missed the runway completely.*³

Two weeks later, Dr. John Morgan of the City University of New York Medical School said in reference to the same study:

*A California-based scientist named Jerome Yesavage wrote the study. It was done in the early 1980s, I think, and it attracted enormous attention. ... Doctor Yesavage's study ... was completely uncontrolled. ... As you all have heard, it is difficult to control for marijuana use. When Doctor Yesavage was funded by the federal government to repeat the study with the simple controls that others and I had suggested, they were unable to show any impact of marijuana use after four hours in a similar group of people. Therefore, I believe that the truth is that marijuana use will impact airplane and driving simulators and to some degree driving performance for three hours to four hours after use; however there is no sustained impact. Any impact is relatively minor.*⁴

Making reference to Robbe's work, which we will be examining in greater detail in this chapter, Professor Morgan added:

A Dutch scientist who has for years worked on driving experiments found that marijuana using drivers have a little difficulty staying right in the middle of the road. That is most sensitive test. If you smoke marijuana, you tend to weave a little bit more than completely sober people do. That is important,

³ Dale Orban, Detective Sergeant, Regina Police Service, for the Canadian Police Association, testimony given before the Special Senate Committee on Illegal Drugs, May 28, 2001, Issue 3, page 47.

⁴ Dr John Morgan, Professor at the City University of New York Medical School, testimony before the Special Senate Committee on Illegal Drugs, June 11, 2001, Issue 4, page 40-41.

although there have been no studies to show that that amount of weaving had a gross impact on driving ability.

The Dutch scientist included in his report that the amount of weaving was approximately the same in individuals consuming very small amounts of alcohol, very small doses of benzodiazepenes and very small doses of antihistamines.⁵

On the same day, Professor Kalant of the University of Toronto responded as follows:

Dr. Morgan referred to some experimental studies this morning. A number of studies, reviewed by Dr. Smiley in the report of the World Health Organization Committee on Health Effects of Cannabis, indicate a fair measure of agreement on what the predominant effects on driving are. The lane control, as Dr. Morgan mentioned, is impaired. The person does not steer as accurately. In addition, there was slower starting time and slower braking time. There was decreased visual search. In other words, when you drive, you must monitor for sources of danger to both sides and not just ahead of you. There was decreased monitoring, decreased recognition of danger signals. The effects were synergistic with those of alcohol. The one favourable thing about cannabis compared with alcohol was that there was less aggressiveness in the cannabis smokers than in the drinkers, so they were less likely to pass dangerously or to speed. Nevertheless, driving ability was impaired not just by weaker, poorer steering control, but also by less alertness to unexpected things that might happen and pose a hazard.

I will not go into the statistics of actual field studies of the involvement of cannabis in driving accidents. However, I would like to say that a number of studies have shown that there has been evidence of cannabis presence in the blood or the urine of people who have been stopped for impaired driving who did not have alcohol present.⁶

As we can see, and as was the case with respect to the effects and consequences on the health of users, there are divergent opinions about the interpretation of studies and their meaning in connection with the specific effects of marijuana on driving.

This chapter is divided into three sections. The first considers the ways of testing for the presence of cannabinoids in the body. The second analyses studies on the known prevalence of impaired driving, in both accident and non-accident contexts. The third and last summarizes what is known about the effects of cannabis on driving based on both laboratory and field studies. As in the other chapters, the Committee will then draw its own conclusions.

⁵ *Ibid.*

⁶ Dr Harold Kalant, Professor Emeritus, University of Toronto, testimony before the Special Senate Committee on Illegal Drugs, June 11, 2001, Issue 4, page 75.

FORMS OF TESTING

There are five known media for testing the presence of cannabinoids in the organism: blood, urine, saliva, hair and perspiration.

Blood is the most appropriate medium for detecting recent cannabis use because only a blood analysis can distinguish between the active ingredients of cannabis and metabolites that have no psychoactive effects. However, as we have already seen, blood concentrations of Δ^9 THC peak 9 minutes after smoking; after 10 minutes only two-thirds of the concentration remains, and it is down to 5 to 10% at the end of an hour; after two hours, it becomes difficult to detect. Thus not all methods are appropriate for testing because of the strong possibility of obtaining false negatives and false positives. The most reliable method, gas chromatography using mass spectrometry for detection, is extremely sensitive and can also estimate the time that has elapsed between the most recent use and the taking of the blood sample.

We saw in Chapter 7 that there was a dose-response relationship: 25 puffs affect cognition more than do 10 puffs, and 10 have more of an effect than 4. But not much data is available on the relationship between concentration and effects on people, and the ability to answer the key road safety question, namely at what concentration can one consider that faculties are impaired? In France, the Δ^9 THC level that constitutes testing positive has been set at 1ng/ml⁷ for drivers involved in fatal accidents. Another author has come up with a formula that establishes a relationship between Δ^9 THC, 11-OH Δ^9 THC and Δ^9 THC-COOH to determine a cannabis influence factor with a positive threshold of 10ng/ml. An equal concentration of Δ^9 THC and COOH suggest use approximately 30 minutes beforehand, and hence a very high probability of psychoactive effects, whereas a higher concentration of COOH than Δ^9 THC suggests that use was more than 40 minutes beforehand. However, a concentration of COOH in excess of 40 μ g/l would indicate a chronic user, and hence it becomes impossible to determine when the last use occurred. Other research has established that a blood concentration of 10 to 15 ng/ml suggests recent use, without however being able to give an exact figure.⁸

Urine tests are also frequently employed and remain the most appropriate method for rapidly determining whether subjects have been using. On the other hand, traces of cannabis can remain in urine for weeks. Furthermore, the traces that remain are of Δ^9 THC-COOH, an inactive metabolite. Consequently, urinalyses are primarily useful for epidemiological measurements of cannabis use, and cannot contribute to information about impaired driving.

⁷ In this chapter, ng means nanogram (i.e. one billion of one gram) and μ g means microgram (one million of one gram)

⁸ INSERM (2001), *op. cit.*, pages 152-153.

The levels of concentration of Δ^9 THC-COOH in urine are very high: for someone who smokes a joint a day, the level is between 50 to 500 ng/ml and may reach several thousands ng/ml in heavy users; the currently recommended threshold level for testing positive is 50ng/ml urine.

Saliva is a very promising option for road safety because it is non intrusive and can indicate recent use with some accuracy. The presence of Δ^9 THC in saliva essentially results from the phenomenon of bucco-dental sequestration during inhalation. Concentrations are very high in the few minutes following absorption, varying between 50 and 1,000 ng/ml, but then decline very quickly in the hours that follow, though they remain detectable for an average of four to six hours. The European ROSITA project compared the reliability of samples taken from urine, perspiration and saliva compared to that taken from blood. Saliva is by far the most reliable, showing an exact correlation in 91% of cases. However, the low level of concentration during the period when the psychoactive effects are active means that sensitive analytical methods are essential. There is unfortunately not yet a sufficiently accurate and reliable rapid detection tool that can be used in driving situations. Hence the driving detection tools correctly identified only 18 to 25% of cases and led to many false negatives.⁹

Perspiration is generally considered poor for detection purposes, because of the persistence of Δ^9 THC in sweat, and the fact that it is also excreted into sweat in small quantities.

Hair looks very promising because the significant amount of Δ^9 THC can determine time since and level of use (low, moderate, high). However, concentrations are only a few ng per mg of hair, which requires highly efficient testing.

The following table, taken from the INSERM report, summarizes the main characteristics of the various biological testing media; where available, we have added the threshold detection level adopted.

⁹ Ramaekers, J.G. et al., 2002 "Performance impairment and risk of motor vehicle crashes after cannabis use" in Pelc, I. (ed.) *International Scientific Conference on Cannabis*, Brussels, page 81.

Main Characteristics of Biological Testing Media					
	Primary cannabinoids	Maximum detection period	Useful for	Methodologies available	Threshold for positive test
Urine	THC-COOH (inactive)	Occasional use: 2 to 7 days Regular use: 7 to 21 days	Identifies use	Yes, many rapid tests	50ng of Δ^9 THC-COOH per ml
Saliva	THC (active)	2 to 10 hours	Identifies recent use	No, no rapid tests	not determined
Perspiration	THC	Highly variable	Not useful	No, no rapid tests	not useful
Hair	THC	Infinite	Identifying & monitoring regular user	Yes, CPG-SM	not determined
Blood	THC 11-OH THC THC-COOH	2 to 10 hours	Confirmation, identification, dosage	Yes, CPG-SM	1ng/ml (France)

In all instances, the handling and transportation of samples and the toxicological dosages are essential to the quality of the analyses.

There is still considerable uncertainty about thresholds that make it possible to affirm that the presence of Δ^9 THC would impair the driver. Furthermore, there is still no reliable rapid screening test to identify recent use (urine tests cannot do this). Moreover, other drugs besides alcohol, including many types of prescription medicines, may have an impact on driving. That is why many authors, and a number of witnesses, suggested to us that Canada adopt the Drug Evaluation and Classification Program (DEC) and recognize police officers trained as Drug Recognition Experts. This practice has now been adopted in most U.S. states (at least 34, as well as the District of Columbia), British Columbia, Australia, Norway and Sweden.

The typical scenario for driving under the influence of psychoactive substances other than alcohol is as follows: a vehicle attracts the attention of a police officer, who pulls the vehicle over and questions the driver; if there are reasonable grounds to believe that the driver is intoxicated, a breathalyser test is administered; however, when the test yields a result below the legal limit, the police officer may still not be convinced that the driver is capable of driving, but how is this to be proven? Before, more often than not, the police officer had to release the driver. As we have just seen, there are no equivalents to the breathalyser test for drugs and medicines, and, for cannabis in particular, traces found in urine in no way establish that use was recent. It was in this context that the police officers working for the Los Angeles Police Department developed the Drug Recognition Expert System (DRE) in the early 1980s. Police

officers are given specific training in the detection of people driving under the influence of psychoactive substances and in the use of the DEC.

The system allows police officers who have reason to believe that drivers are intoxicated to call on an officer specially trained in drug recognition, who can then evaluate the driver on the basis of a set of systematic and rigorous factors that are recognized as signs of the presence of drugs. The process involves 12 steps:

- **Breath alcohol test:** This test will have been conducted by the police officer who stopped the vehicle. The Drug Recognition Expert is only called in when the test is negative.
- **Interview by the arresting officer:** The DRE asks the arresting officer a series of conventional questions: in what condition did he or she find the suspect, what he or she had observed, if he or she found drugs in the vehicle, suspect's statement, etc.
- **Preliminary examination (the first of three pulse measurements):** This involves determining whether there are reasonable grounds to suspect the presence of drugs, and hence eliminate the possibility that there is a medical condition. The DRE observes the suspect's overall condition, and questions the suspect about health, examines the pupils and gaze, and takes the first of three pulse measurements. If the DRE feels that there are no signs, the suspect is released. If the condition is medical, a medical evaluation is requested. However, if drugs are suspected, the examination continues
- **Examination of the eyes:** This consists of three tests: horizontal gaze, vertical gaze and convergence. Apparently when under the influence of any drug, it is impossible to have an involuntary jerky movement of the pupils on the vertical axis without first provoking such movements on the horizontal axis. Thus if there are only vertical jerky pupil movements, it is likely a medical condition (e.g. brain damage). If there is horizontal jerkiness, there are likely drugs involved. To determine horizontal movements, the DRE moves a pen or other object horizontally in front of the suspect's eyes. For vertical movement, the pen is moved from top to bottom. Furthermore, as certain drugs prevent eyes from being able to converge towards the bridge of the nose, the DRE performs a convergence test by placing the pen or object on the person's nose and asking the suspect to look at it
- **Divided attention psychophysical tests:** The tests include balancing, walking, standing on one leg and the finger-to-nose test
- **Vital signs examination:** This is the second of three pulse measurements, as well as a measurement of blood pressure and body temperature
- **Dark room examination:** This involves examining the pupils under four different lighting conditions: room lighting, darkness, indirect light and direct light
- **Examination of muscle tone:** arm movements

- Examination for injection sites
- Questions about suspect's drug use and living habits
- Opinion: On the basis of all the evidence, the DRE forms an opinion based on a reasonable amount of certainty
- Toxicological examination: The purpose of this examination is to corroborate the analysis by the DRE officer. The decision concerning prosecution is made only when the analyses are returned.

The system was standardized in the early 1980s with the assistance of the U.S. National Highway Traffic Safety Administration. It was first tested in a laboratory study.¹⁰ In the study, four Drug Recognition Experts evaluated subjects who had received either a placebo or a dose of drugs. Neither the subjects nor the officers knew who had received the drugs. In 95% of cases, the officers correctly identified the subjects who had not been given drugs. In 97% of cases, they correctly identified the subjects who had been given drugs and in 98.7% of cases, they were able to determine which subjects were under the influence of drugs.

A field study was then conducted in 1985, once again with the assistance of the Highway Traffic Safety Administration.¹¹ In the study, blood samples of 173 drivers arrested for driving under the influence of drugs were analyzed by an independent laboratory. The study showed that the analyses carried out by the Drug Recognition Expert officers correctly predicted the presence of drugs other than alcohol in 94% of cases. In 79% of the cases, the analyses of the officers identifying the presence of a specific drug turned out to be accurate.

The most complete study was carried out in Arizona in 1994. In this study, the files of over 500 persons arrested for driving under the influence of drugs were analyzed, and toxicological analyses were conducted. The study showed that the toxicological analyses corroborated the conclusions of the officers in 83.5% of cases. Similar studies conducted in other states yielded comparable results: 81.3% in Texas, 84.5% in Minnesota, 88.2% in California, 88.2% in Hawaii and 88% in Oregon.

With respect specifically to cannabis, the expected signs listed in the system are generally the following: no horizontal or vertical shaking, but no convergence in gaze, dilated pupils, accelerated pulse and high blood pressure.

In short, given the limits of detection in the field of the influence of cannabis and the results of these studies, **it would appear that it would be highly desirable to adopt the DEC and train police officers in drug recognition.**

¹⁰ Bigelow, G.E. (1985) *Identifying types of drug intoxication; laboratory evaluation of a subject procedure*. Cited in Sandler, D. (2000) "Expert and Opinion Testimony of Law Enforcement Officers Regarding Identification of Drug Impaired Drivers." *University of Hawaii Law Review* 23 (1), 150-181.

¹¹ Compton, P.R. (1986) *Field Evaluation of the Los Angeles Police Department Drugs Detection Procedure*. Cited in Sandler, *op. cit.*, page 151.

EPIDEMIOLOGICAL DATA

According to a number of the witnesses we heard, more than 40% of people whose driving abilities are impaired would drive under the influence of cannabis. Others have said that approximately 12% of accidents causing injury could be attributed to the use of cannabis. What do the studies reveal?

Data on the frequency of driving under the influence of cannabis (whether on its own or together with other substances) are, for obvious reasons, difficult to obtain. First, for drivers involved in an accident, a positive breathalyzer test means most of the time that no other measurements are taken because a blood alcohol level above the legal limit is enough to take legal action. Second, the methods available to detect the presence of THC are intrusive (blood, urine), unlike the breathalyzer, and hence pose specific legal and ethical problems. Other forms of measurements, such as saliva samples, do not, for the time being, allow roadside detection. Lastly, in studies of all drivers, the consent of drivers is required to take a blood or urine sample, thus limiting the possibility of generalizing results. Nevertheless, we will summarize the main points of a number of studies conducted in recent years.

Studies not involving accidents

Two types of studies were conducted: surveys of all drivers selected at random from the flow of traffic at various times of the day and week, and studies where it was presumed that the people were driving under the influence during police checks. The following table, drawn from the various data available from INSERM, summarizes these studies.

Detection and prevalence of cannabis in Europe and Quebec where no accidents are involved ¹²				
Reference country	Population	Detection method	Sample	Prevalence (%)
No presumption of driving under the influence of psychoactive substances				
Germany, Kruger et al., 1995	All drivers	Screening: FPIA saliva Confirmation: CG/SM saliva	2 234 (of 3 027)	0.6
Netherlands, Matthijssen, 1998	Night drivers on weekends	Screening: combined saliva, perspiration and urine test	293 (of 402)	5
Italy, Zancanner et al., 1995	Night drivers on weekends	Clinical screening, clinical and toxicological check (blood, urine)	1 237	1.5

¹² Table reproduced from INSERM (2001), *op. cit.*, page 175.

Detection and prevalence of cannabis in Europe and Quebec where no accidents are involved ¹²				
Reference country	Population	Detection method	Sample	Prevalence (%)
Canada	Highway drivers	Urine	2 281	5
Dussault et al., 2000	(representative survey)	Saliva	2 260	(in progress)
		Breathalyzer (alcohol)	5 281	> 0.8 : 0.8
With presumption of driving under the influence of psychoactive substances				
Norway, Skurtveit et al., 1996	Drivers	Screening: immunoassay blood;	2 529	26
		Confirmation: CG/SM		
Denmark, Worm and Steentoft, 1996	Drivers	blood	317	10
		Screening: RIA blood	221	17
		Confirmation: CG/SM		
United Kingdom, Scotland, Seymour and Oliver, 1999	Drivers	blood	640	26
		Screening: immunoassay blood;		
		Confirmation: CG/SM blood		

In all, it was observed that the detection rates for the presence of cannabis varied between 1% and 5% when there was no presumption of impaired driving. However, the missing data, which likely resulted from refusals to supply a sample, made it impossible to draw clear conclusions. The studies with presumption of driving under the influence of drugs had clearly higher results: between 10 and 26%. These results do not necessarily reveal a much higher prevalence of driving under the influence of psychoactive substances, but rather a higher level of vigilance by the police. Indeed, as we shall see immediately, the prevalence of cannabis detection in fatal accidents is no higher in Norway (7.5%) than in other countries.

Studies where an accident was involved

It is difficult to compare studies between countries because the detection methods, even in an accident context, varies widely from country to country. We wish to note once again that simply finding traces of cannabis in drivers involved in accidents is not necessarily a sign that its use was the cause of the accident. Nor does the absence of any screening result mean that no one was driving under the influence of cannabis.

The following table, adapted from INSERM results, refers to a number of recent studies in Europe, America and Australia.

Prevalence of impaired driving(ID) when there are accidents ¹³				
Country	Population	Detection method	Sample	Prevalence of cannabis (%)
Belgium Meulemans et al., 1997	Casualty accidents (2-wheeled and cars)	Screening: urine Confirmation: urine CG/SM and urine blood comparison	1 879	6 (urine) 3.6 (blood)
Spain Alvarez et al., 1997	Fatal accidents with suspected ID	Screening: immunoassay blood Confirmation: CG/SM blood	979	1.5 not reliable
France, Mura et al., 2001	Casualty accidents (control group: patients)	No screening Confirmation: CG/SM blood	420 (381)	11.2 (10.8)
France, Kintz et al., 2000	Casualty accidents	Screening: urine Confirmation: CG/SM urine and blood, saliva and perspiration tests Screening: EMIT urine	198	13.6 (urine) 9.6 (blood)
Italy, Ferrara, 1990	Injuries Friday night checks		4 350 500	5.5
Norway, Christophersen, 1995	Injuries, non-fatal accidents	Screening: immunoassay blood Confirmation: CG/SM blood	394	7.5
United Kingdom, Tunbridge, 2000	Fatal accidents (including 516 drivers)	Screening: immunoassay urine Confirmation: CG/SM blood	1 138 516	12 10
Australia, Longo, 2000	Injuries (non-fatal accidents)	Screening: immunoassay blood Confirmation: CG/SM blood	2 500	11
Canada, Cimburra, 1990	Killed		1 169	11
United States, Logan, 1996	Killed		347	11

Three of these studies are particularly interesting. The Mura et al. study (2001) shows a significant difference by driver age: among 18-20 year olds, the Δ^9 THC was present in 18.6% of drivers, and in 50% of cases it was present alone (without alcohol). An earlier study by Mura (1999) had shown that cannabis was particularly common among young drivers: from 35% to 43% in the under 30 age group, with an even higher prevalence (43%) for the under 20s, whereas past the age of 35, the prevalence drops to 3%.¹⁴

¹³ Adapted from INSERM (2001) *op. cit.*, pages 171 and 174.

¹⁴ See INSERM, (2001), *op. cit.*, page 172.

The study by Kintz et al. (2000) is interesting primarily because it clearly shows that, after alcohol (13.6%) cannabis is the substance most frequently present among drivers involved in accidents (9.6%). This study also shows that in the whole sample, the incidence of cannabis as measured by taking a blood sample (9.6%) is close to the level of driving under the influence of alcohol (10.6%).¹⁵

Then, Longo's study is of special interest because of the size and representativeness of the sample and the fact that separate analyses were done of Δ^9 THC and Δ^9 THC-COOH. The study detected the presence of cannabinoids in 10.8% of drivers: 8% for Δ^9 THC-COOH alone and 2.8% for Δ^9 THC-COOH and Δ^9 THC together, thereby showing a lower percentage of positive tests for Δ^9 THC than the other studies. Furthermore, as in the other studies, subjects testing positive to Δ^9 THC were younger and more often men.

Closer to home, Mercer and Jeffery examined the toxicological analyses for 227 drivers killed in traffic accidents in British Columbia between October 1999 and September 1991.¹⁶ Samples had been taken during autopsies within 24 hours of death, which according to the authors, may indicate an under-estimation of the presence of alcohol or drugs. Of the 227 people killed, 186 (43%) showed no signs of either alcohol or drugs, 83 (37%) alcohol only, 23 (11%) alcohol and drugs, and 21 drugs only. As for cannabis, 29 of the people killed (13%; 26 men and 3 women) tested positive to Δ^9 THC-COOH, showing an average concentration of 15.9 ng/ml. In the +alcohol/+drugs group, (23 subjects), 17 tested positive to THC metabolites and 8 were also positive to Δ^9 THC (13%). For the 0alcohol/+drugs group, (21 subjects), 8 (all men) were positive to Δ^9 THC-COOH, and 4 to Δ^9 THC. Even though the authors concluded that Δ^9 THC / Δ^9 THC-COOH was present in 13% of cases, which is a percentage comparable to most of the other studies, only 12 subjects killed tested positive to Δ^9 THC with or without alcohol and only 4 without alcohol.

Lastly, a more recent epidemiological study dealt with 1,158 cases of fatal accidents (391) or of cases of driving under the influence of psychoactive substances when the percentage of alcohol in the blood was below 0.1 (767) reported in Canadian forensic laboratories on November 12, 1994.¹⁷ The most frequent substances identified were benzodiazepines (590 cases), alcohol (580), cannabis (551), stimulants (224), opiates (176) and barbiturates (131). For cannabis, we get the following table:

¹⁵ *Ibid.*

¹⁶ Mercer, W.G. and W.K. Jeffery (1995) "Alcohol, Drugs and Impairment in Fatal Traffic Accidents in British Columbia" *Accid. Anal. And Prev.*, 27 (3), pages 335-343.

¹⁷ Jeffery, W.K. et al. (1996) "The involvement of drugs in driving in Canada: An update to 1994." *Can. Soc. Forens. Sci. J.*, 29 (2), pages 93-98.

Presence of cannabis in Canada (1994)			
	Total	with alcohol	without alcohol
THC			
➤ Impaired driving	181	129	52
➤ Death	198	98	100
THC-COOH			
➤ Impaired driving	127	29	98
➤ Death	45	24	21

In all, cases in which Δ^9 THC without alcohol was present accounted for 13% of the total, which is close to the figure found in the other studies.

Out of all the studies, it was found that the presence of cannabis among drivers who were injured or killed varies between 3.6% (confirmed by blood analysis) and 13% (unconfirmed). Where there was confirmation of the presence of Δ^9 THC compared to Δ^9 THC-COOH, the presence of the active substance decreases by half. In addition, the risk of testing positive is much higher for young men than other drivers. These conclusions are largely shared by other authors.¹⁸

Epidemiological studies on youth

In recent years, epidemiological studies on youth in the school environment have asked questions about the frequency of driving under the influence of psychoactive substances, cannabis in particular. In Ontario, the 2002 OSDUS study described in Chapter 6 shows that 19.3% of the students had driven their car one hour or less after having taken cannabis at least once in the past twelve months.¹⁹ More interesting is that this compares with 15% who said they had taken their car less than an hour after one or two drinks. In Manitoba, the survey of youths in school reveals that almost 20% see nothing wrong in driving after taking cannabis.²⁰

¹⁸ Including the INSERM report (2001), *op. cit.*; Ramaekers, J.G. et al., (2002) "Performance impairment and risk of motor vehicle crashes after cannabis use" in Pelc, I. (ed.) *International Scientific Conference on Cannabis*, Brussels.

¹⁹ Adlaf, E.M. et A. Paglia (2001) *Drug Use among Ontario Students 1997-2001. Findings from the OSDUS*. Toronto: Centre for Addiction and Mental Health, page 134.

²⁰ Patten, D., et coll., (2000) *Substance Use among High School Students in Manitoba*. Winnipeg: Addictions Foundation of Manitoba.

Finally, the Cohen and Kaal study on long term consumers had shown that no less than 42% of the respondents in Amsterdam and 74% in San Francisco had driven their car under the influence of cannabis.²¹

Risk assessment

Given the difficulties of conducting reliable epidemiological studies on driving under the influence of cannabis, a number of authors have analyzed the probability of responsibility and the risk ratio involved in the use of cannabis. These studies distinguish between drivers who are responsible for accidents and those who are not. The former are the subjects and the latter the control group. Comparisons are then made of their intoxication to various substances. Clearly, placing drivers into the two categories of responsible/not responsible may depend on an investigator's perception of whether or not psychoactive substances are present.

The following table, which is reproduced from the Ramaekers et al. report (2002) for the International Scientific Conference on Cannabis summarizes the results of various studies.²² It should be pointed out that the probability of responsibility for drivers showing traces of cannabis (Δ^9 THC and/or Δ^9 THC-COOH, whether measured in blood or urine) is compared to the responsibility of drivers involved in an accident not testing positive to any substance (including alcohol). The risk ratio for drivers not testing positive to any substances is 1.0 and is used as a point of comparison to determine the statistical significance of observed change in the risk level of impaired drivers. When the reference value is above the statistical confidence level of 95%, the obvious conclusion is that the drug is 95% associated with an increased risk of responsibility.

Level of culpability relative to driving under the influence of cannabis				
Authors	Substance	Odds ratio	Confidence interval at 95%	N of drivers culpable / not culpable
Terhune & Fell (1982), U.S.	Drug free cases	1.0		94/179
	Alcohol	5.4*	2.8 – 10.5	45/16
	THC	2.1	0.7 – 6.6	9/8
	Alcohol/THC	-		-
Williams et al. (1985), U.S.	Drug free cases	1.0		55/23
	Alcohol	5.0	2.1 – 12.2	120/10
	THC or THC-COOH	0.2	0.2 – 1.5	10/9
	Alcohol/THC or THC-COOH	8.6*	3.1 – 26.9	123/6

²¹ Cohen, P.D.A. et H.L. Kaal (2001) *The Irrelevance of Drug Policy. Patterns and careers of experienced cannabis use in the populations of Amsterdam, San Francisco and Bremen*. Amsterdam: University of Amsterdam, CEDRO, page 68.

²² Ramaekers et al. (2002), op.cit., page 73.

Terhune et al. (1992), U.S.	Drug free cases	1.0		
	Alcohol	7.4*		541/258
	THC	0.7	5.1 – 10.7	587/38
	Alcohol/THC	8.4*	0.2 – 1.8 2.1 – 72.1	11/8 35/2
Drummer (1994), Australia	Drug free cases	1.0		
	Alcohol	5.5*		392/140
	THC-COOH	0.7	3.2 – 9.6	261/17
	Alcohol/THC-COOH	5.3*	0.4 – 1.5 1.9 – 20.3	29/14 59/9
Hunter et al. (1998), Australia	Drug free cases	1.0		
	Alcohol	6.8*		944/821
	THC		4.3 – 11.1	173/22
	➤ ≤ 1.0 ng/ml	0.35	0.3 – 2.1	2/5
	➤ 1.1 – 2.0 ng/ml	0.51	0.2 – 1.4	7/12
	➤ > 2 ng/ml	1.74	0.6 – 5.7	12/6
	THC-COOH			
	➤ 1 – 10 ng/ml	0.69	0.5 – 2.2	19/24
	➤ 11 – 20 ng/ml	1.04	0.4 – 2.1	18/15
	➤ 21 – 30 ng/ml	0.87	0.6 – 4.8	12/12
	➤ > 30 ng/ml	1.62	0.6 – 4.8	13/7
	Alcohol/THC	11.5*	4.6 – 36.7	66/6
Lowenstein & Koziol-McLain (2001), U.S.	No substance	1.0		
	Alcohol	3.2	1.1 – 9.4	114/126
	THC-COOH	1.1	0.5 – 2.4	17/6
	Alcohol/THC-COOH	3.5*	1.2 – 11.4	17/17 16/5
Drummer et al. (2001) & Swann (2000), Australia	No substance	1.0		
	Alcohol	5.7*		1209/372
	THC	3.0*	4.1 – 8.2	720/39
	THC > 5 ng/ml	6.4*	1.2 – 7.6	49/5
	THC-COOH	0.8	1.3 – 115.7	24/0
	Alcohol/THC	19*	0 – 1.3 2.6 – 136.1	68/26 65/62

The study findings show that cannabis alone does not increase the likelihood of responsibility in an accident. However, most of the studies used a measurement of THC-COOH, an inactive metabolite that can remain in urine for several days. When the authors separated out THC alone, the risk ratio was slightly higher, even though it did not reach the required level of significance. In addition, as the concentration of THC increases, the more the ratio increases, once again suggesting a dose-response relationship. Furthermore, the cannabis and alcohol combination significantly increases risk. Without being able to draw any definite conclusions, there are some signs that their effects are in synergy and not merely additive.

Studies on injured drivers (Terhune (1982) and Hunter (1998)) have ratios somewhat higher than in the other studies on fatal accidents. According to Bates and Blakely (1999), the apparent reduction in the risk of a fatal accident stems from the fact that drivers under the influence of cannabis drive less dangerously, for example by reducing their speed.²³

To conclude, we are rather in agreement with INSERM concerning these studies:

[translation] The findings definitely confirm the significant risk of alcohol, but generally fail to demonstrate that there is an effect of cannabis alone on the risk of being responsible for a fatal accident or an accident involving serious injury. The methodological difficulties that make such a demonstration difficult contribute considerably to the absence of statistically indisputable results. Analyses of responsibility nevertheless suggest that the association between alcohol and cannabis increases the risk of being responsible for an accident, compared to drinking alone; however, this finding needs to be consolidated. Lastly, the most recent data tend to show that there is a risk of becoming responsible at heavy concentrations of Δ^9 THC. This involves using cannabis immediately before driving, and perhaps applies also to chronic users.²⁴

EXPERIMENTAL STUDIES

Epidemiological studies indicate a relatively high level of driving under the influence of cannabis, between 5% to 12% of drivers, mostly among young men. At the same time, neither these studies nor the responsibility/risk analyses reach clear conclusions concerning the role of cannabis in dangerous driving. Hence the interest in studies on how cannabis affects driving ability and driving itself. Studies on the psychomotor and cognitive skills needed to drive vehicles have measured factors such as: motor coordination, reaction time, attention, visual attention and deductive reasoning. There are two types of studies on driving: simulated studies and field studies, whether on a track, in the city or on a highway. Most studies focus on single doses for recreational users. They use control group protocols and cross-linked protocols, including placebos and comparisons with alcohol. However, they are limited by the fact that they mainly measure the acute effects of single doses, making it difficult to determine whether more experienced users would react in the same way. The following sections examine both types of study.

²³ Cited in INSERM (2001), *op. cit.*, page 192.

²⁴ INSERM (2001), *op. cit.*, page 194.

Non-driving activities

In 1985, Moskowitz published a remarkable synthesis of studies on the psychomotor and cognitive effects of cannabis.²⁵ In this synthesis, he examined motor coordination, reaction time, tracking and sensory functions. The author observed the following:

- motor coordination, measured by hand stability, body balance and movement accuracy was significantly affected. However, the application of these results to driving a car is limited, except in driving situations that require considerable coordination, such as emergency situations. The limits in terms of dose and number of subjects tested (between 8 and 16) also need to be noted
- reaction time was not significantly changed: *“There are a sufficient number of experiments involving both simple and complex reaction time situations to leave us relatively well assured that neither the speed of initial detection nor the speed of responding are, per se, impaired by marihuana. Rather, when marihuana produces a reaction time increase, there is some dimension of the information processing task which the subject must execute which bears the brunt of the experiment.”*²⁶ Attention rather than reaction time was affected by marijuana use
- straight line: this dimension was particularly sensitive to the effects of marijuana, and the vast majority of studies showed a significant reduction in the ability to go in a straight line or correct deviations from the line
- the sensory functions (hearing and visual) are often affected, but the studies did not yield precise results concerning the distinction between simple tasks and complex tasks.

Ramaeckers et al. (2002), reported a meta-analysis on 87 controlled laboratory studies on the psychomotor effects of cannabis conducted by Berghaus et al. (1998). These authors found that the number of psychomotor functions linked to driving (following, reaction time, perception, hand-eye coordination, body balance, signal detection and divided and continuous attention) affected by THC reached a maximum during the first hour after smoking, and one to two hours after oral ingestion. The maximum figures were comparable to those obtained with an alcohol concentration equivalent to > 0.05 g/dl. The number of functions affected reached zero after three to four hours, and only higher doses continued to have an effect. The studies surveyed also showed that THC concentration in the blood is highly correlated to psychomotor effects: a concentration of between 14 ng/ml and 60 ng/ml affected between 70% and 80% of tasks.²⁷

The following table summarizes these data:

²⁵ Moskowitz, H., (1985) “Marihuana and Driving.” *Accid. Anal. Prev.*, 17 (4), pages 323-345.

²⁶ *Ibid.*, page 330.

²⁷ Ramaeckers J.G. et al. (2002), *op. cit.*, page 77.

Deterioration of performance on psychomotor tests by dose, time and method of ingestion										
THC dose	Time (in hours)									
	< 1		1-2		2-3		3-4		4-5	
	Tests (n)	% affected	Tests (n)	% affected	Tests (n)	% affected	Tests (n)	% affected	Tests (n)	% affected
Smoked										
< 9mg	271	61%	33	36%	10	30%	10	0%	11	0%
9 – 18 mg	193	53%	48	38%	8	38%	6	0%	2	0%
≥ 18 mg	64	64%	28	36%	10	40%	15	53%	3	67%
Total	528	58%	109	37%	28	36%	31	26%	16	13%
Oral										
< 9mg	3	33%	49	14%	37	8%	13	8%	-	-
9 – 18 mg	3	0%	41	39%	45	18%	17	18%	-	-
≥ 18 mg	3	0%	45	60%	15	33%	15	33%	11	45%
Total	9	11%	135	37%	97	20%	45	20%	11	45%

More recently, after surveying the studies carried out in recent years, the reports prepared by INSERM and the International Scientific Conference on Cannabis reached largely similar conclusions: cannabis affects reaction time where choice is involved, road tracking, shared attention and continuous attention, as well as memory processes, but does not significantly affect simple reaction time or visual or eye-movement functions.

While driving

One of the weaknesses of the laboratory studies is the difficulty of relating psychomotor and cognitive tasks directly to driving. Several tests measured in these studies are short and relatively simple and do not necessarily reflect real situations. The advantage of simulated driving studies and field driving studies is that it brings the conditions closer to reality.

Most contemporary studies have similar characteristics: subjects have had a driver's licence for at least three years. They are often regular cannabis users. The subjects receive either cannabis or a placebo in a double-blind situation that is very strictly timed to control the level of THC transmitted. In some instances, the experimenters also include comparisons with alcohol and an alcohol placebo. However, it is impossible to control how much subjects inhale and actually absorb. The cannabis prepared by the U.S. National Institute of Drug Abuse (NIDA) varies between 1.75% THC for low doses, 2.67% for moderate doses and 3.95% for strong doses. Converted into µg/kg of weight, the doses correspond to 100, 200 and 300 µg/kg, whereas the heavy dose usually preferred by regular users is generally 308 µg/kg. The subjects are

familiarized with the equipment used and the tasks to be performed, and are accompanied by instructors on actual driving studies. Measurements include the standard deviation of lateral position in relation to the road, the control over longitudinal position (distance) in relation to the vehicle ahead, decision-making in emergencies, style of driving and risk taking.

The following table, adapted from INSERM data, summarizes a number of the more recent studies.

Effects of cannabis on car driving ²⁸				
Reference / environment	Subject / Dose / Protocol	Tasks	Measurements	Results
Simulator				
Liguori et al., 1998	10 users Placebo	Avoid a barrier that suddenly appears by braking (55 to 60mph)	Total braking time	? Slightly significant at 1.77
	Cigarette 1.77% THC smoked in 5 mn Cigarette 3.95% THC smoked in 5 mn Test: 2 mn after Duration: 1 hour		Lag time to take foot off accelerator and step on brake	THC, slightly more at 3.95 No difference
		Judgment: maintain speed of 30mph on marked road and select widest lane at intersection	Average speed Number of cones knocked over Number of successful choices	No effect
Sexton et al., 2000	15 users Placebo	Highway section with vehicle ahead passing	Average reaction time	? At low dose (high level of variability at heavy dose: ns)
	Grass, low dose 1.77% THC			
	Heavy dose: 2.67% THC 1 resin cigarette: 1.70% THC	Highway section with vehicle ahead braking	Average reaction time	? At low dose (ns)
	Blood and saliva sample 10 mn after start Test 30 mn Duration: 25 mn	16.7 km of highway section	Maximum, minimum and average speed	? Average of 6mph at low and heavy dose
		Left and right turns	Standard deviation for perfect line	? Variation at heavy dose versus low dose or placebo
		Intersection with traffic lights, with 4 lane road	Response time in going through amber	? At heavy dose

²⁸ Table adapted from INSERM (2001) *op. cit.*, pages 183-184.

Effects of cannabis on car driving ²⁸				
Reference / environment	Subject / Dose / Protocol	Tasks	Measurements	Results
Actual driving			Average waiting period at a point 10m from the stop line	? At heavy dose (high level of variability: ns)
Robbe, 1998 study No. 1 Closed portion of highway (cannabis)	24 users Placebo 100, 200 and 300 Test: 40 mn and 1 hour 40 mn after	Constant speed at 90km/hr and tracking over 22km	Standard deviation of lateral position	? Instability at all 3 doses
			Average lateral position deviation	No effect
			Average speed and standard deviation	No effect
Study No. 2 Normal traffic on highway (cannabis)	16 users same doses as study 1 Test: 45 mn after	Tracking control (Ibid.) 64km, 50 mn	Same measurements	Same effects
		Following cars over 50m at variable speed (between 80 and 100km/h) over 16 km, 15 mn	Average reaction time	? ns
			Average distances and standard deviations	Distance increased by 8, 6 and 2 m for 100, 200 and 300 THC
Study No. 3 City driving (cannabis)	16 users Placebo 100 Test: 30 mn after	City driving 17.5 km Dense, moderate or light traffic	External observations	No significant change
			Internal observations: skill, manoeuvres, turns...	No effect
Study No. 3 City driving (alcohol)	16 users Placebo Alcohol level: 0.5 g/l	Ditto	External observations	No significant change
			Internal observations: skills, manoeuvres, turns...	0.34 g/l alcohol level modifies control and manoeuvres
Robbe, 1998 Highway driving (cannabis and alcohol)	18 users THC: 100, 200 Alcohol: 0.4 g/l Preparation: Alcohol 0 + THC 0 Alcohol) + THC 100 Alcohol 0 + THC 200 Alcohol 0.4 + THC 0 Alcohol 0.4 + THC 100	Tracking: speed at 100km and constant lateral position	Standard deviation of lateral position	? Tracking variability; low alcohol alone, THC 100 alone; Moderate: THC 200 Heavy: alcohol 0.4 and THC two doses

Effects of cannabis on car driving ²⁸				
Reference / environment	Subject / Dose / Protocol	Tasks	Measurements	Results
	Alcohol 0.4 + THC 200 Alcohol plus cannabis 60 mn after Tests between 9:00 p.m. and 11:15 p.m.	Following: follow a vehicle over 50 m with speed varying by ± 15 km/hr every 5mn	Reaction time	? Reaction time for 0.4 alcohol and THC 200
		Driving in traffic	Average distances and standard deviations	? Variability in distance between cars in all cases
Lamers and Ramaekers, 2000 City driving (cannabis and alcohol)	16 users THC 100 Alcohol 0.5 g/l 4 preparations: Alcohol 0 + THC 0 Alcohol 0.5 + THC 0 Alcohol 0 + THC 100 Alcohol 0.5 + THC 100 Tests: 15 mn after Duration: 45 mn	City driving 15 km Visual search monitoring	Frequency of appropriate eye movements Quality of driving	No effect with alcohol alone or cannabis alone ? Performance if alcohol + cannabis No effect

It is interesting to recall that one of the first driving studies on the road was conducted for the Le Dain Commission.²⁹ In this study, on a closed track, 16 subjects were each given the 4 following preparations: placebo, marijuana 21 and marijuana 88 µg/kg THC and a dose of alcohol equivalent to BAC 0.07. The tests were conducted immediately after use and three hours later. The subjects were to complete six circuits of the track (1.8 km) with manoeuvres involving slowing down while going forward and backwards, maintaining a trajectory and weaving through cones. The alcohol and heavy dose of marijuana decreased driver performance in tests conducted immediately after use. At the heavy cannabis dose, drivers drove more slowly. On the second test, the differences were less clear.

When the results of this study are compared to those conducted more recently using much more sophisticated methods, it can be seen that the results are remarkably similar.³⁰ Thus the following was observed:

- lateral control: this is the variable that is most sensitive to the effects of THC, but the effects are variable, depending on the dose and time; only heavy doses significantly affected lateral control over the vehicle. In comparison,

²⁹ See Hansteen, R.W, et al. (1976) "Effects of cannabis and alcohol on automobile driving and psychomotor tracking." *Annals of the New York Academy of Science*, 282, pages 240-256.

³⁰ See notably the survey of studies and the discussion in Smiley, A., (1999) "Marijuana: On-Road and Driving Simulator Studies" in Kalant, H. et al., (ed) *The Health Effects of Cannabis*. Toronto: Addiction Research Foundation, pp. 173 passim.

alcohol has a greater effect on vehicle lateral control and speed (linked variables)

- speed control: in almost all cases, the use of cannabis significantly decreases speed
- risk-taking: in addition to decreasing speed, it is generally found that there is an increase in distance between vehicles among marijuana users, and less of a tendency to pass or attempt dangerous manoeuvres
- decision time: this variable is particularly important in actual driving situations. The results do not appear to be very consistent. Smiley suggests that reaction time is unaffected when the subjects are told that they need to respond rapidly, whereas on the other hand, when the obstacles are completely unexpected, the subjects who used cannabis do not perform as well
- combined effects of alcohol and cannabis: when the researchers checked the effects of the two substances, the combined effects of cannabis and alcohol were systematically greater than alcohol alone or, even more so, than cannabis alone.

Lastly, with low doses, subjects had the impression that their driving was not as good as observers felt it was, which was not necessarily the case with higher doses, where the perceptions of both the drivers and the observers agreed.

CONCLUSIONS

The Committee feels it is likely that cannabis makes users more cautious, partly because they are aware of their deficiencies and they compensate by reducing speed and taking fewer risks. However, because what we are dealing with is no longer the consequences on the users themselves, but the possible consequences of their behaviour on others, the Committee feels that it is important to **opt for the greatest possible caution** with respect to the issue of driving under the influence of cannabis. Given what we have seen in this chapter, we conclude the following.

Conclusions of Chapter 8	
Epidemiological data	<ul style="list-style-type: none"> ➤ Between 5% and 12% of drivers may drive under the influence of cannabis; this percentage increases to over 20% for young men under 25 years of age. ➤ This in itself does not mean that drivers under the influence of cannabis represent a traffic safety risk. ➤ A not insignificant percentage of drivers test positive for cannabis and alcohol together.

Data on effects on driving	<ul style="list-style-type: none">➤ Cannabis alone, particularly in low doses, has little effect on the skills involved in automobile driving.➤ Cannabis, particularly in the doses that match typical doses for regular users, has a negative impact on decision time and trajectory.➤ Cannabis leads to a more cautious style of driving.➤ The effects of cannabis when combined with alcohol are more significant than for alcohol alone.
Testing	<ul style="list-style-type: none">➤ Blood remains the best medium for detecting the presence of cannabinoids.➤ Urine cannot screen for recent use.➤ Saliva is promising, but rapid commercial tests are not yet reliable enough.➤ The visual recognition method used by police officers has yielded satisfactory results.
Further studies	<p>It is essential to conduct studies in order to:</p> <ul style="list-style-type: none">➤ Develop a rapid testing tool.➤ Learn more about the driving habits of cannabis users.

CHAPTER 9

USE OF MARIJUANA FOR THERAPEUTIC PURPOSES

There has been renewed interest in the issue of the use of marijuana for therapeutic purposes in recent years, particularly in Canada. In the wake of an Ontario Court of Appeal ruling which found the provisions of the *Controlled Drugs and Substances Act* to be unconstitutional pertaining to the therapeutic use of marijuana, the federal Health Minister made new regulations in July 2001 that give people with specified medical problems access to marijuana under certain conditions. Later that same year, an international conference on medicinal cannabis held in The Hague, Netherlands, drew delegates from Canada and several other Western countries.¹ Earlier, in 1999, the National Institute of Medicine in the United States published an assessment of the science base of marijuana and medicine.²

However, the scientific community – the medical community in particular – is divided on the real therapeutic effectiveness of marijuana. Some are quick to say that opening the door to medical marijuana would be a step toward outright legalization of the substance. Witness the following two quotes, the first of which is from a former director of the National Institute on Drug Abuse (NIDA) in the United States:

*It is primarily the political muscle of the marijuana legalization proponents that today creates the motivation to do additional research on marijuana smoke. [...] There is one explanation for the strident insistence of marijuana legalization proponents that only smoked marijuana will do as 'medicine'. They appear to be determined to have sick medical patients smoking marijuana in the public eye. They want that outcome because that act legitimizes the use of marijuana by changing the common public perception of marijuana from a harmful drug to a useful medicine.*³

*Although many who champion medical marijuana use do so on compassionate grounds, with the firm conviction that smoked marijuana provides benefits unavailable by other means, much support comes from those who advocate the liberalization of drug policy and the decriminalization of drug use.*⁴

¹ *International Conference on Medicinal Cannabis*, November 22-23, 2001, The Hague, Netherlands.

² Joy, J.E., S.J. Watson and J.A. Benson (1999) (eds.), *Marijuana and Medicine: Assessing the Science Base*. Washington, D.C.: National Academy Press.

³ DuPont, R.L. (1999), "Examining the Debate on the Use of Medical Marijuana", *Proceedings of the Association of American Physicians*, Volume 111, No. 2, page 169.

⁴ Rosenthal, M.S., and H.D. Kleber (1999), "Making Sense of Medical Marijuana", *Proceedings of the Association of American Physicians*, Volume 111, No. 2, page 159.

It is true, as Professor Mark Ware pointed out in his testimony before the Committee, that in the current legal and political context, it is difficult to conduct studies and, more importantly, do so without being influenced by the heated debate over marijuana.

*Let us look at the effect that current drug policy has had on our understanding of cannabis. All our data on the health effects of cannabis have been collected under a paradigm of prohibition. This may seem self-evident but it constitutes an important source of bias. In examining the health effects of cannabis, an estimate of the use of cannabis in the healthy population is important. [...] Surveys of illicit drug use are notorious for poor response rates. It hampers our ability to draw conclusions on what cannabis does, if we don't really know who is doing it. It is important to estimate the size of the bias, and the effect it has had, and good research will always try to minimize it. However, in my experience of critically reviewing the literature on cannabis effects on health, examples exist where important estimates of risk are based on studies which have inappropriate control selection. [...] The question therefore changes from 'how has cannabis policy affected health?' and becomes 'has cannabis policy affected our understanding of the health effects of cannabis?'*⁵

It is also true that the issue of medicinal marijuana challenges us on the very concept of modern medicine and its links with the pharmaceuticals industry, since research on cannabinoids has already led to the development of synthetic THC compounds. Drug companies are known to have played a major role in international negotiations leading to the adoption of the first international conventions on the control of psychoactive substances.⁶ Moreover, the marijuana plant itself, because it cannot be patented, is of no interest to major pharmaceutical research groups.

Beyond the scientific “proof” that marijuana is effective and the prospect of physicians prescribing marijuana with sufficient confidence, many people believe, based on personal experience, that marijuana has a direct impact in terms of improving their well-being with minimum adverse effects. That view is what led to the creation of “compassion clubs”, organizations that distribute marijuana to growing numbers of clients. One of the questions this raises is how much evidence is needed before people can be allowed to freely use marijuana to relieve a medical condition. Indeed, do we have to think of marijuana in strictly medical terms?

We saw in Chapter 7 that the long-term effects of using marijuana, even on a regular basis, are limited and that even the most serious effects, such as lung cancer, have yet to be clearly demonstrated. We also saw that the adverse effects of prolonged use on cognitive function are more prevalent in people who are already vulnerable because of their young age when they started using, for example, or their personal condition (for example, psychotic predispositions). We also saw that, even assuming

⁵ Dr. Mark Ware, Assistant Professor of Family Medicine and Anesthesia, McGill University, testimony before the Special Senate Committee on Illegal Drugs, Senate of Canada, May 31, 2002.

⁶ See in particular the study by W.B. McAllistair, *Drug Diplomacy in the 20th Century*. This point will be discussed later in chapter 19.

some tolerance and a certain level of psychological dependency, those effects are minor, the signs of withdrawal minor, and treatment shorter and less often necessary than for other drugs. To a degree, it appears that the psychoactive properties of marijuana, which some see coupled with rejection of society, others with a weak personality and still others with immoral behaviour, make the substance suspect, whether in medical or non-medical applications.

In that sense, the issue of medical marijuana is not so much a question of legalization through the back door as it is a question of open examination of each person's underlying conception of the "drug". In a way, it is a prime opportunity to explore our preconceptions and prejudices. Stating, as we did in Chapters 6 and 7, that the psychological, physiological or social effects of marijuana use are by all indications relatively benign says nothing about the therapeutic benefits of the plant in the same way that medical uses of the poppy say nothing about the individual or social harm that can be caused by heroin. Dr. Kalant echoed this view:

The separation of the control methods between medical and non-medical use is generally clearly understood. Both heroin and cocaine have limited but recognized medical uses. [...] Yet, nobody argues that, because these drugs have some limited medical use, that they should therefore be legalized for non-medical use. [...] Cannabis is perhaps the one exception in which possible medical uses are often claimed by some proponents of legalization of cannabis as a justification for legalization for non-medical use. This to me seems quite irrational. There is no logical reason why having a medical use should be any argument at all, either for or against, availability for non-medical use.⁷

However, as Dr. Ware reiterated, "*the safety of cannabis in humans has been extensively studied, thanks in part to the massive Western cohort of 'healthy human volunteers' of the last 40 years. Cannabis may have undergone the most extensive and unorthodox Phase I clinical trials of any drug in history.*"⁸ While it is true that research protocols to allow medical use of a substance are and must remain rigorous, there is no clear boundary between the two areas of research. This was illustrated to some extent in the review in Chapter 7 of studies on the effects and consequences of marijuana. Indeed, the opposite approach struck us as more common, where, based on the presumed harmful effects of marijuana on psychological and physical health, the therapeutic usefulness of marijuana becomes at least suspect. We take as an example the position of the Canadian Medical Association.

In his testimony before the Commission, current CMA president Dr. Henry Haddad said:

⁷ Dr. Harold Kalant, Professor Emeritus at the University of Toronto, testimony before the Special Senate Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, June 11, 2001, Issue 4, pages 70-71.

⁸ Dr. Mark Ware, *op.cit.*

While our understanding of all the possible long-term health effects that prolong Canada's use is still evolving, what we do know is troubling. The health risks range from acute effects such as anxiety, dysphoria, or the feeling of being ill; cognitive impairment to the chronic effects such as bronchitis, emphysema and cancer. Canada's youth have also been subject to pulmonary damage comparable to that produced by tobacco use but the effects are much more acute and rapid. Evidence suggests that smoking two or three cannabis cigarettes a day has the same health effect as smoking 20 cigarettes a day. Therefore, the potential long-term health effects of cannabis use could be quite severe.

The CMA's concerns regarding the impact of cannabis are in part why we are opposed to the federal government's current medical marijuana access regulations. In our May 7, 2001, letter to the Minister of Health, the CMA noted 'lack of credible information on the risks and benefits of medical marijuana.'

During discussions on the government's medical marijuana regulations, we highlighted the health concerns and research that indicates that "marijuana is an addictive substance that is known to have psychoactive effects and in its smoke form is particularly harmful to health."

We have concluded that while benefits of medical marijuana are unknown, the health risks are real. Therefore, it would be inappropriate for physicians to prescribe marijuana to their patients, a position that was supported by the Canadian Medical Association.

[...]

The CMA is concerned that this debate concerning decriminalization and the medical marijuana issue has, to some extent, legitimized its use for recreational purposes. It is important that our message to you regarding decriminalization be clear and understood. Decriminalization must be tied to a national drug strategy that promotes awareness and prevention and provides for comprehensive treatment in addition to research and monitoring of the program.

[...]

The CMA believes that any changes regarding illegal drug policy should be gradual. Like any other public health issue, education and awareness of the potential harms associated with cannabis and other illegal drug use is critical to reducing drug usage.⁹

If we were to succeed in showing that the effects are not as bad as had been thought, would it change in any way the issues related to medical use of marijuana? The acute effects identified by the CMA are possible but relatively rare and often the product of personal predispositions, context or a particular crop of marijuana. In fact, the primary acute reactions, the reactions documented by most of the research, are pleasant and help the user relax. If we were to convince the medical association that marijuana is not particularly addictive and that even where it is, the effects are relatively benign, would that clear the way for medical use of marijuana? Aside from the fact that

⁹ Dr. Henry Haddad, President, Canadian Medical Association, testimony before the Special Senate Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, March 11, 2002, Issue 14, pages 52-53 and 54-55.

marijuana is only tenuously linked to “drug addiction”, there is by no means consensus in the scientific community on the very notion of drug addiction, viewed primarily as a disease.

The question lies elsewhere – in two places, in fact. First, knowledge of the potentially harmful effects of marijuana says nothing about the qualities of the plant as a medicine. To be sure, knowledge of the secondary effects of drugs, including their addictive potential, is essential to the pharmacopoeia. However, those substances must first be established as drugs, particularly in terms of effectiveness and reliability. Second, the whole issue is broached as if resistance to medical use of marijuana were based not so much on the absence of medical knowledge *per se* – which is the case to some extent, as we will see later in this chapter – as on the link between marijuana and drug addiction. From that perspective, the issue is quickly resolved: in keeping with the medical maxim “*first do no harm*”, a physician will not prescribe a treatment the effects of which could lead to an illness at least as serious as the illness being treated in the first place. If marijuana is listed as an illegal drug, banned in some contexts because of its harmful effects and capable of leading to drug addiction, what compelling arguments could be put forward to “save” medical marijuana?

But none of that should matter to physicians or scientists. It is not a question of defending general public policy on marijuana or even all illegal drugs. It is not a question of sending a symbolic message about “drugs”. It is not a question of being afraid that young people will use marijuana if it is approved as a medicine. The question – the only question – for physicians is whether, to what extent and in what circumstances, marijuana serves a therapeutic purpose. Physicians would have to determine whether people with certain diseases would benefit from marijuana use and weigh the side effects against the benefits. If they decide the patient should use marijuana, they then have to consider how he or she might get it. The issue of deciding whether cannabis has therapeutic benefits is obviously clouded by the current legal context on cannabis. This may be inevitable, but those who take public positions on cannabis for therapeutic purposes should say so.

The rest of this chapter is devoted to the history of the use of marijuana for therapeutic purposes and the status of contemporary knowledge of marijuana and synthetic cannabinoids. We then give a brief account of compassion clubs and other organizations that supply marijuana for therapeutic use, as well as various public policy regimes. We conclude with our views on medical use of marijuana. In a later chapter, we discuss which public policy regime would be most appropriate given the status of medical use of marijuana.

HISTORY

The therapeutic potential of marijuana has apparently been known since the beginning of recorded history. In fact, marijuana was likely used for medicinal purposes even before its psychoactive properties were tapped.

The medical history of marijuana is closely related to its analgesic properties, as noted by Ethan Russo:

Cannabis has a history as an analgesic agent that spans at least 4000 years, including a century in mainstream Western medicine. [...] The reasons lie in the remarkable pharmacological properties of the herb and new scientific research reveals the inextricable link that cannabinoids possess with our own internal biochemistry. In essence, the cannabinoids form a system in parallel with that of the endogenous opioids in modulating pain. More important, cannabis and its endogenous synthetic counterparts may be uniquely effective in pain syndromes in which opiates and other analgesics fail.¹⁰

According to Russo, written documents and ethnographic traces of medical use of marijuana have been found in many countries. In China, a second-century medical paper reported that marijuana was used as a surgical anaesthetic. In India, marijuana was been used to treat migraines and chronic pain 2000 B.C. In Egypt, where most scholars thought that marijuana had not been introduced, there is evidence that it had been in use in medicine since the days of the pharaohs; traces of marijuana were found in the tombs of Amenophis IV and Ramses II. Marijuana was apparently used to treat glaucoma and labour pain. Marijuana was administered orally, rectally or vaginally, applied to the skin, inserted in the eyes and smoked.

In Assyria, Babylonia and Arcadia, marijuana was apparently used as an analgesic to treat migraines and menstrual pain and for its psychoactive properties. Evidence of marijuana use to control labour pain has also been found in Palestine and Israel. The Greeks and Romans used marijuana for general pain control and specifically for gout and rheumatism. In the Muslim world, there are references to therapeutic use dating back to the ninth century.

In the mid 17th century, western medicine discovered the medicinal properties of marijuana. A compendium of plants published in 1640 in England made reference to marijuana being used in the form of a paste containing essence from the plant and other ingredients. In France, the work on hemp published by Mercandier described a number of uses: dried and applied as a plaster, it eased the pain associated with tumours; boiled and applied as a plaster, it helped ease the pain of rheumatism, gout and various muscle inflammations; crushed into a powder and mixed with butter, it

¹⁰ Russo, E.B. (2002), "The role of cannabis and cannabinoids in pain management", in Weiner, R.S. (ed.), *Pain Management. A Practical Guide for Clinicians*, Boca Raton, London, New York, Washington: CRC Press.

soothed burns. In his classification of plants, Linnée recognized the medicinal properties of marijuana as a pain reducer.

Medical use of marijuana became more widespread in England in the middle of the 19th century when the plant was brought back from India. Even the personal physician of Queen Victoria, Russell Reynolds, used it: he treated his celebrated patient for dysmenorrhea throughout her adult life using cannabis extract. In an 1868 paper, he wrote that unlike opiates, marijuana could be used today without causing problems tomorrow.¹¹

Between 1890 and 1940, English, Irish, French and then American physicians and pharmacists testified in different ways to the usefulness of various marijuana preparations in relieving pain. One British pharmacologist even reintroduced the smoking of marijuana in 1899, pointing out that smoking was particularly useful if an immediate effect was desired.¹²

Marijuana is still part of the pharmacopoeia, at least informally, of many countries in southeast Asia. Marijuana use in India was recently described as follows:

*Charas is the resinous exudation that collects on the leaves and flowering tops of plants (equivalent to the Arabic hashish); it is the active principle of hemp; it is a valuable narcotic, especially in cases where opium cannot be administered it is of great value in malarial and periodical headaches, migraine, acute mania, whooping cough, cough of phthisis, asthma, anaemia of brain, nervous vomiting, tetanos, convulsion, insanity, delirium, dysuria, and nervous exhaustion; it is also used as an anaesthetic in dysmenorrhea, as an appetizer and aphrodisiac, as an anodyne in itching of eczema, neuralgia, severe pains of various kinds of corns, etc.*¹³

It is also used in Colombia, Jamaica and Brazil.

It is tempting, of course, enamoured as we are with our modern science, to dismiss these traditional uses as “home remedies” – and the stuff of quacks. However, the fact that marijuana has been used so long for the same types of condition, that it has sometimes been described so accurately, that it has transcended cultures and histories, and that modern medicine suggests that marijuana could in fact be useful in treating the chronic pain associated with various medical conditions should stop us from being too cynical about these “old-fashioned” uses.

¹¹ Quoted in Russo, *op. cit.*, page 359.

¹² *Ibid.*, page 360.

¹³ *Ibid.*, page 361.

CONTEMPORARY KNOWLEDGE

Two questions strike us relevant here. The first is whether marijuana in fact has the therapeutic effects that have been ascribed to it traditionally and more recently in the personal stories of people suffering from chronic pain and other conditions. If those benefits are real, the second question, altogether different and based on different criteria, is whether marijuana should be considered a drug.

Therapeutic uses

Knowledge of the mechanics of cannabinoids and the endogenous cannabinoid system allows a number of observations to be made. Generally, and bearing in mind what was written in Chapter 5, the action of cannabinoids can be described as follows:

[...]the overall effect is that of a cellular inhibition rather than cellular activation. It settles down nerve firing through a number of different types of reactions, primarily through changes that lead to changes in the flow of ion channels, which changes the firing behaviour of the cell which then changes how it communicates with other cells down the line.

Opening of potassium channels with decreased cell firing and closing of calcium channels with decreased release of neurotransmitters or overall cellular inhibition, which quiets things down. Those could have major therapeutic implications in certain clinical situations, such as pain and spasticity. They have implications in settling down nerve firing within pain conducting systems.¹⁴

More specifically, cannabinoids act on various neurophysiological systems associated with pain, either alone or in combination with the endogenous opiate system.¹⁵ Cannabinoids affect the release of serotonin, which is itself associated with different types of pain, migraines in particular. Anandamide and other cannabinoid antagonists block the release of serotonin and ketanserin, both of which are linked to migraines, suggesting the potential effect of THC. Cannabinoids are also related to the dopamine system, which has been linked with migraines and other types of pain. Further, cannabinoids inhibit prostaglandin, producing an anti-inflammatory effect. Some studies have shown that THC is in that sense a more powerful analgesic than aspirin or even cortisone. Interacting with the endogenous opioid systems, cannabinoids increase the production of beta-endorphins, which reduce the effect of migraines. According to some studies, THC may have greater therapeutic potential than

¹⁴ Dr. Mary Lynch, Director, Canadian Consortium for the Investigation of Cannabinoids, Professor, Dalhousie University, testimony before the Special Senate Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, June 11, 2001, Issue 4, page 49.

¹⁵ The following information is taken primarily from Russo, *op. cit.*, Hartel, C.R., "Therapeutic Uses of Cannabis and Cannabinoids", in Kalant, H. (ed.), *The Health Effects of Cannabis*, Toronto: Addiction Research Foundation, and INSERM (2001), *op. cit.*

morphine, either because the applications would be more specific in some cases, because in other cases morphine aggravates some symptoms, or because THC lacks the sedative properties of morphine. Moreover, THC may have an antinociceptive effect on the periaqueductal grey. Finally, THC acts as a glutamate blocker and thereby reduces muscle and inflammatory pain.

*Italian researchers Nicolodi, Sicuteri and colleagues have recently elucidated the role of NMDA antagonists in eliminating hyperalgesia in migraine, chronic daily headaches, fibromyalgia, and possibly other mechanisms of chronic pain. Gabapentin and ketamine were suggested as tools to block this system and provide amelioration. Given the above observations and relationships, it is logical that prolonged use of THC prophylactically may exert similar benefits, as was espoused in cures of chronic daily headache in the 19th century with regular use of extract of Indian hemp.*¹⁶

In real terms, these mechanisms mean that cannabinoids can be beneficial in a number of situations that involve pain, but not pain alone. The following are foremost among them.

- **Emesis:** Nausea is a common condition in cancer patients undergoing chemotherapy. As a result of a series of clinical trials involving people who reported using marijuana to relieve their vomiting, synthetic dronabinol (or Marinol) and nabilone (or Cesamet) were developed and tested primarily in the United States and Great Britain beginning in the 1970s. According to Dr. Lynch, “cannabinoids are thought to be modest antiemetics. There are more effective antiemetic agents available. However, because antiemetics work through a number of different mechanisms and because often we need to be able to target more than one mechanism to treat nausea and vomiting, cannabinoids are looking like they may be useful because they may offer us another option.”¹⁷
- **Cachexia:** A significant number of people with AIDS/HIV suffer progressive anorexia coupled with weight loss. Some studies show that cannabinoids can help improve their situation, mainly because THC increases appetite. Some reservations have been voiced regarding the harmful effects of smoked THC on the immune system: “More recently, Nieman et al (1993) have shown that cigarette smoking by HIV seropositive individuals is associated with a more rapid development of AIDS because smoking increases the incidence of *Pneumocystis carinii* pneumonia (PCP).”¹⁸ Others, however, have come to different conclusions: “A particular public health concern surrounds cannabis effects on HIV/AIDS. Four studies among others may reduce related concern. Kaslow et al. (1989) demonstrated no evidence that cannabis accelerated immunodeficiency parameters in

¹⁶ Russo, *op. cit.*, page 365.

¹⁷ Dr. Mary Lynch, *op. cit.*, page 52.

¹⁸ R.D. Hartel, *op. cit.*, page 465.

HIV-positive patients. DiFranco et al. (1996) ascertained no acceleration of HIV to full-blown AIDS in cannabis smokers. Whitfield, Bechtel and Starich (1997) observed no deleterious effects of cannabis usage in HIV/AIDS patients, even those with the lowest CD4 counts. Finally, Abrams et al. (2000) studied the effects of cannabis smoking on HIV-positive patients on protease inhibitor drugs in a prospective randomized, partially blinded placebo-controlled trial. No adverse effects on CD4 counts were observed secondary to cannabis.”¹⁹

- **Glaucoma:** Glaucoma is an eye disease in which intraocular pressure builds because the fluid in the eye has difficulty draining and which leads to gradual destruction of the ocular nerves. Marijuana, in particular paste made from cannabis leaves, has been used to reduce intraocular pressure since ancient times, as we saw in the previous section. Recent studies suggest that marijuana – including smoked marijuana – helps reduce the effects of glaucoma. However, there have been some reservations because of some of the side effects of smoking marijuana (redness and drying of the eyes). In a case study by Russo *et al.* on four patients who smoked marijuana, one patient with glaucoma stated in court that the marijuana saved her sight.
- **Spasms and convulsions:** The anticonvulsive properties of marijuana that help control epileptic seizures and the antispasm properties that are useful in treating multiple sclerosis are well known in Canada; marijuana use for epilepsy gave rise to the Ontario Court of Appeal decision in Parker. Smoked marijuana and synthetic cannabinoids appears to be effective in controlling these conditions. However, because of the bioavailability of synthetic compounds (between 20% and 30%) and their delayed effect relative to smoked marijuana, patients seem to prefer smoking.
- **Pain:** The analgesic effects of marijuana in easing different types of pain have also been known since ancient times. We described the analgesic effect of marijuana above. More importantly, marijuana has specific effects on some types of pain that opiates do not.

Marijuana as a drug?

In order for a product to be recognized as a drug in the pharmacopoeia, it must meet at least three criteria:

¹⁹ Russo, E.B., *et al.* (2002), “Chronic cannabis use in the compassionate investigational new drug program: An examination of benefits and adverse effects of legal clinical cannabis”, *Journal of Cannabis Therapeutics*, Vol. 2, No. 1, page 45.

- Quality: the dosage must be determined based on a constant and known composition that is easy to administer to the patient;
- Effectiveness: rigorous clinical trials must have demonstrated the effectiveness of the drug; and
- Safety: studies must show the known and foreseeable side effects of the drug.

Because of the lack of rigorous clinical studies using recognized protocols, whole marijuana has not yet met these criteria. There are a number of reasons for this. First, the research protocols needed to test drugs involve double-blind tests with control groups and randomly selected subjects, all conditions that are hard to achieve with marijuana. Second, the current legal climate limits the potential for such studies in terms of both the availability of marijuana and test conditions. Third, the marijuana provided by the National Institute of Drug Abuse (NIDA) for medical research – including research conducted by Health Canada – is of dubious quality:²⁰ THC concentration may be a determining factor in the quality of the therapeutic effects, yet NIDA marijuana contains only 1.8% to 5% THC. Moreover, weaker marijuana requires more draws and releases more CO than marijuana with a higher THC content. Other cannabinoids are not measured, yet they are known to also have a bearing on the medical properties of marijuana. The paper in which the marijuana is rolled is of poor quality. The marijuana is often more than two years old and may not have been stored under conditions that would preserve all its qualities. Finally, the marijuana contains many seeds and other plant debris. Fourth, it is difficult to control the amount of marijuana actually absorbed by the subjects: the way a person draws on the cigarette, whether or not the person is accustomed to smoking, the subject's preferences and the length of time the subject inhales are factors which can affect the test conditions and which researchers have not yet been able to measure accurately.

It must also be possible to answer the following and other questions:

- Is there a difference between synthetic cannabinoids and whole marijuana?
- What is the optimum marijuana profile in a given situation?
- Do different doses and different forms of ingestion produce significantly different effects?

²⁰ Russo, *op.cit.*, discusses these weaknesses in greater detail.

In recent years, analyses of the scientific literature have been conducted by the Institute of Medicine in the United States and the British Medical Society and in various government reports in England, the Netherlands and elsewhere. The Institute of Medicine concluded that there is evidence of the therapeutic potential of marijuana as an analgesic, antiemetic and appetite stimulant. It noted, however, that smoking is a difficult way to control the ingestion of marijuana and also has side effects related specifically to its carcinogenic potential and the link with respiratory diseases. The institute also found that the psychoactive effects of marijuana are sometimes, but not always, beneficial for some patients. Finally, the institute pointed out that smoking marijuana should not be recommended over the long term because of the potential mental effects, but could be prescribed for persons with terminal or degenerative diseases, where long-term considerations are secondary. In the Netherlands, the National Health Council issued a notice in 1995 stating that scientific evidence on medical use of marijuana was insufficient because of poor research and uncertainty as to the properties of smoked marijuana. The council also noted that marijuana could have therapeutic applications in the following areas: nausea and vomiting related to chemotherapy, appetite stimulation for people with AIDS or cancer, multiple sclerosis and glaucoma. In 2001, the Netherlands created a medical marijuana bureau in the ministry of health and began clinical studies. In England, the House of Lords has taken a position similar to that of the Institute of Medicine in the United States, and the Ministry of Health is currently conducting at least one clinical study.

Clearly, **not enough is known about marijuana to establish it as a drug in the strict sense of the word, and we only have partial knowledge of cannabinoids.** Most cannabinoids are a single cannabinoid compound, whereas marijuana contains many substances the effects of which interact to produce the therapeutic effects. Yet researchers have still not specifically identified the role of the various cannabinoids. Patients who use synthetic dronabinol or nabilone-based compounds generally report not feeling the same beneficial effects as when they smoke marijuana. It may take longer for the effects to be felt, and the effects may be less specific. Further, isolating only one of the components of marijuana could, according to some studies, increase the risk of panic attacks and even marijuana-induced psychosis.

A significant benefit of whole marijuana is that it can be delivered in smoked format, with a rapid onset of action and a titratable effect by the patient. [...] In practice, both patients and oncologists report that smoked marijuana is somewhat more effective than and as safe as the legally available oral cannabinoids. Another major difference between marijuana and THC, besides the availability of a smokeable, titratable delivery system with whole marijuana, is that 9-THC alone can produce the relatively common effects of anxiety disorder and panic attack. [...] The adverse effects can also occur with marijuana use,

*but are felt to be diminished by the presence of cannabidiol, a nonpsychoactive compound with antipsychotic properties.*²¹

Finally, the cost of synthetic compounds, which is much higher, has to be taken into account.

The advantages of smoked marijuana are that patients can determine the necessary dose on their own and feel the effects more quickly, while limiting the adverse side effects other than the effect on the respiratory system. It should be noted in passing the importance of self-regulation by patients: most of the clinical cases reported and most of the testimony from compassion club representatives agree that patients prefer to use marijuana with a higher THC content than recreational marijuana but only ingest the quantity they need to achieve the calming effects. However, the problems related to specific knowledge of the effectiveness and quality of marijuana limit the ability of physicians to prescribe the appropriate dose. More advanced knowledge of smoked marijuana pertains to the degree of safety, although there is variation in interpretation of the data. We generally concur in the finding of Professor Scholten:

Cannabis use for medicinal reasons by patients with a somatic disease is relatively safe, on condition that it is not smoked; when smoked it has the same carcinogenic potential as tobacco. The alternatives are oral administration or inhalation using a vaporiser.

The acute toxicity of cannabis is very low; it is almost impossible to die of an overdose (users would have to eat or smoke their own weight in fresh cannabis, or 7,500 grams of dried cannabis to achieve this). The principal side effects in therapeutic use are psychosis and euphoria. Little is known about this drug's addictive effect in medical use, though experience with the use of morphine for pain relief has shown that the risk of psychological addiction is low – much lower than when used as a stimulant. As the addictive effect of cannabis is also quite low when used as a stimulant, it may be assumed that this will always be very low in a medical setting.

*When estimating the chronic toxicity of cannabis, it should be borne in mind that the doses used in therapeutic applications will probably be lower than those used for "recreational" purposes, decreasing the risks of side effects.*²²

Does this mean that medical use of marijuana, smoking in particular, should be discouraged or even banned? The last section addresses this question.

CURRENT THERAPEUTIC PRACTICES

²¹ Gurley, R.J., R. Aronow and M. Katz (1998), "Medicinal marijuana: A comprehensive review", *Journal of Psychoactive Drugs*. Vol. 30, No. 2, page 139.

²² Scholten, W.K. (2002), "Medicinal cannabis: A quick scan on the therapeutic use of cannabis", in Pelc, I. (ed.), *International Scientific Conference on Cannabis*, Brussels.

The main reservations about therapeutic use relate to the lack of comprehensive knowledge based on controlled medical studies and also to the long-term impact on the respiratory system and carcinogenic potential. In some cases, reservations have been expressed regarding the psychoactive properties of marijuana. There is a growing consensus on the therapeutic potential of marijuana, particularly smoked marijuana. While marijuana cannot, strictly speaking, be considered a drug, at least for the time being, it still has therapeutic properties. How then do we classify and regulate it?

Canada, the United States and many other countries have developed a parallel practice of allowing people with certain conditions to use marijuana. The most familiar example in Canada is without question the Vancouver Compassion Club.

In its mission statement, the club advocates a holistic approach to health. It not only supplies marijuana, but also delivers other forms of natural medicine (herbal therapy, acupuncture, massage, etc.). The club is built on the values of compassion, emancipation and complementarity between approaches.

In the six years since the Compassion Club was founded, an intimate knowledge of the therapeutic effects of marijuana has been acquired. The club offers a daily menu comprising seven to ten varieties of marijuana, one or two varieties of hashish, cannabis tincture, and baked goods containing marijuana. It sells marijuana for \$3 to \$10 a gram, depending on the variety. It currently serves more than 2,000 members/clients.

Our members have a huge range of symptoms and conditions such as HIV and AIDS, cancer, multiple sclerosis, arthritis, chronic pain, fibromyalgia, seizure disorders, glaucoma, hepatitis C, anxiety, depression, insomnia, eating disorders and many others. [...]

It is important that medicinal users have access to a variety of strains, as the effect of cannabis varies depending on which strain is being used and the method of ingestion. Our members are made aware of the differences and can then select the best strain of cannabis to most effectively treat their symptoms.

Indica and sativa are the two main varieties of the cannabis plant used as medicine. Many strains are crosses of those two varieties. Within each of those varieties and crosses there are a huge number of individual strains, each with a different cannabinoid profile and effect.

According to the anecdotal evidence, the indica strains are a relaxant, effective for anxiety, pain, nausea, appetite stimulation, sleep, muscle spasms and tremors, among other symptoms. The sativa strains are more of a stimulant, effective in appetite stimulation, relieving depression, migraines, pain and nausea. We are now aware of specific strains that are effective for specific conditions and symptoms. Members keep track of their use in order to find the most effective strain for themselves. We also keep close records monitoring members' purchases in order to assist members to track their own consumption and for us to prevent reselling and to encourage responsible use.²³

²³ Hilary Black, Director, Vancouver Compassion Club, testimony before the Special Senate Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, November 7, 2001, Issue 10, page 36.

Having read that testimony and the documents given to us by the club, visited the club's premises and examined its records, and heard the testimony of other people who work for similar organizations in Montreal and Toronto, we can safely say that there are links between this therapeutic practice and the data produced by research on medical uses of marijuana.

We also observe that this organization, like others that provide a similar service in Canada, keeps detailed records of their clients and their marijuana use; these records allow treatment to be monitored, but could also be excellent material for empirical research. **We can only lament the fact that Health Canada has not undertaken clinical research in cooperation with this organization** We share the reservations voiced by Hilary Black regarding the traditional protocols used in research on therapeutic use of marijuana:

*We created a research proposal with a team of research scientists from Vancouver. However, we were turned down because we refuse to facilitate a study using a placebo or low-quality, low-potency cannabis imported from the US National Institute on Drug Abuse. Any study attempting to prove the efficacy of cannabis as a medicine using such a low-potency herb, or unknown strains such as those currently being grown in Canada by Plant Prairie Systems, is destined to fail. There is no need to import cannabis for research, considering the high quality and huge quantity of cannabis being produced in Canada. The information we could gather is being requested by doctors, patients, pharmaceutical companies, Plant Prairie Systems and Health Canada, yet we are not financially empowered to facilitate this research.*²⁴

No one will deny that research on therapeutic uses of marijuana, whether smoked or synthetic, must continue in an effort to further clarify the key elements of quality, effectiveness and safety. Everyone agrees that we should learn more about the strains and doses appropriate to various conditions. For all that, do we have to think of marijuana as a drug like the other drugs listed in the pharmacopoeia? Do we have to have the same requirements as those applicable to prescribed drugs, or should we relax the rules to view marijuana a natural health product? Were it not for the legal system and the international conventions governing marijuana, would the plant not be considered more a natural health product like other plants and herbs?

Casting the issue in those terms forces us to think differently about the therapeutic use of marijuana. If the aim is to make it a approved therapeutic product, the reservations of the medical profession, or at least of some representatives of the profession, are understandable: they cannot endorse the approach until the proper controlled studies are carried out so that physicians can prescribe marijuana as confidently as they prescribe other approved therapeutic products. If marijuana is recognized as having therapeutic uses in some cases – at least as proven as any other plant used in homeopathy or herbal therapy – the aim is instead to give it the same status as other natural health products.

²⁴ *Ibid.*, page 39.

CONCLUSIONS

The Committee is of the opinion that the potential therapeutic uses of marijuana have been **sufficiently documented to permit its use for therapeutic purposes**. It should be acknowledged that smoking marijuana can have harmful side effects, particularly for the respiratory system, and users should be informed accordingly. It should also be acknowledged that research is needed to further clarify the specific field of marijuana use and the long-term effects of marijuana.

Conclusions of Chapter 9	
Therapeutic applications	<ul style="list-style-type: none"> ➤ There are clear, though non-definitive indications of the therapeutic benefits of marijuana in the following conditions: analgesic for chronic pain, antispasm for multiple sclerosis, anticonvulsive for epilepsy, antiemetic for chemotherapy and appetite stimulant for cachexia. ➤ There are less clear indications regarding the effect of marijuana on glaucoma and other medical conditions.
Marijuana as a drug	<ul style="list-style-type: none"> ➤ Marijuana has not been established as a drug through rigorous, controlled studies. ➤ The quality and effectiveness of marijuana, primarily smoked marijuana, have not been determined in clinical studies.
Marijuana and synthetic compounds	<ul style="list-style-type: none"> ➤ There have been some studies of synthetic compounds, but the knowledge base is still too small to determine effectiveness and safety. ➤ Generally, the effects of smoked marijuana are more specific and occur faster than the effects of synthetic compounds. ➤ The absence of certain cannabinoids in synthetic compounds can lead to harmful side effects, such as panic attacks and cannabinoid psychoses. ➤ Smoked marijuana is potentially harmful to the respiratory system. ➤ People who smoke marijuana for therapeutic purposes self-regulate their use depending on

Therapeutic practices

their physical condition and do not really seek the psychoactive effect

- People who smoke marijuana for therapeutic purposes prefer to have a choice as to methods of use.
- Measures should be taken to support and encourage the development of alternative practices, such as the establishment of compassion clubs.
- The practices of these organizations are in line with the therapeutic indications arising from clinical studies and meet the strict rules on quality and safety

Research

- The studies that have already been approved by Health Canada must be conducted as quickly as possible.
- The qualities of the marijuana used in those studies must meet the standards of current practice in compassion clubs, not NIDA standards.
- The studies should focus on applications and the specific doses for various medical conditions.
- Health Canada should, at the earliest possible opportunity, undertake a clinical study in cooperation with Canadian compassion clubs.

CHAPTER 10

CANADIANS' OPINIONS AND ATTITUDES

One of our main objectives throughout our study was to get Canadians involved. We wanted people to share their opinions, experiences and fears regarding marijuana. We also wanted to provide access to the information we held so as to contribute, within our modest means, to better knowledge of the realities of marijuana, if only to raise the level of public debate. At the start of each public hearing the Committee Chair stated:

The second thrust is the sharing of knowledge. This is definitely our most noble objective. The committee wants all Canadians to become informed and share the information we collect. Our challenge will be to plan and organize a system to ensure that the knowledge is available and distributed. We would also like to hear what people think about this knowledge. In order to do this, in the spring of 2002, we will be holding public hearings in various parts of Canada.

This was indeed a major challenge. It is one thing to passively make available such information as proceedings of our hearings and our commissioned research reports. It is another thing to actively disseminate that information widely, having the means to do so. And it is another thing again to take the pulse of Canadian society.

To convey the information to Canadians, we chose to make full use of our Internet site, posting all of our documents as they were ready. To boost circulation, we used two main tools. The first was a conventional tool: the media. We worked to get as much media coverage as possible in order to promote our work or simply let people know the Committee existed. With the same goal in mind, some members of the Committee took part in conferences, round table discussions and open-line shows. The second tool, one we considered essential in promoting our work, was the discussion paper we released in May 2002. The paper laid out some of our preliminary research findings on eight key issues, put forward a number of public policy options and proposed questions for the public hearings. The main aims of the paper were to convey our knowledge and generate public interest. A third objective was to provide a backdrop for the public hearings we held throughout the country in May and June 2002.

Only time will tell whether and to what extent we were successful in promoting our work and, more importantly, in increasing public knowledge of marijuana. We did not have the financial means to conduct a far-reaching public information campaign or

an opinion poll before and after the release of the discussion paper to determine whether we had any impact on Canadians.

It is much harder to gauge the public's opinions, attitudes and concerns. The traditional method of surveying a representative sample of the population was too expensive. Surveys also have limits, which we will discuss in more detail later. However, we did commission a qualitative study using focus groups, the results of which will be presented in this chapter. We will also report the results of other surveys that came to our attention. As well, many Canadians wrote to us or sent us e-mails, and some came out to our public hearings. We obviously cannot draw any conclusions from this: the only people who wrote to us were probably people to whom the issue is very important, regardless of which way they lean. Some will be cited but we reiterate that nothing is to be drawn from these opinions in terms of representativeness.

No account of Canadians' opinions on and attitudes toward drugs in general would be complete without an examination of the role of the media in shaping those opinions and attitudes. In recent years, as a result of this Committee's work and other initiatives, various Canadian newspapers and magazines have run stories or written editorials on the issue. These will be the focus of the first part of the chapter. The next part presents the results of surveys and polls, including the survey we commissioned and surveys conducted in different provinces. The last part covers our understanding of what Canadians told us.

THE MEDIA

At the start of the century, the media played a key role in creating a moral "panic" over illegal drugs. First it was the "Yellow Peril" and the opium crisis in the early 20th century, primarily in Vancouver.¹

*[...] tolerance for the habit of smoking opium lasted only as long as British Columbia's tolerance for the Chinese. In the early years of the twentieth century, both a labour surplus and anti-Asian resentment developed [...] If you look at the Vancouver Province, virtually any front page in the first five years of the 20th century, there are racist cartoons warning about the yellow peril, about how British Columbia is going to be swallowed up by the Chinese, and about another boatload arriving.*²

¹ See the analyses by Giffen, P.J., *et al.* (1991), *Panic and Indifference. The Politics of Canada's Drug Laws*, Ottawa: Canadian Centre on Substance Abuse; Boyd, N. (1991), *High Society: Illegal and Legal Drugs in Canada*, Toronto: Key Porter Books.

² Boyd, N., *op. cit.*, pages 27-29.

The following appeared in *Canadian Magazine* in 1900:

*It was quite evident he (the Chinese servant) had had his share and a night of it, for there are Chinese dens in Vancouver where opium is smoked and unspeakable infamies are practised, and no matter how meek and mild your Chinaman may look, no matter how gentle his voice or confiding his manner, Saturday night is almost certain to find him 'doped' in his bunk, weaving dreams under the poppy's subtle spell.*³

Then it was the cocaine plague in Montreal as described by the following article in the *Montreal Witness* in 1910:

*This curse of cocaine [...] has existed for a short time in the city. It is a real evil. It is a social plague, and it goes on spreading so fearfully that it is time for society to take marked notice. Alcoholism and morphia are nothing to cocaine. It is the agent for the seduction of our daughters and the demoralization of our young men. [...] Those who know what cocaine is and what its evils are, are those who can hurt society most.*⁴

This vision of the decay and degeneration of the working class and, more broadly, Anglo-British and Christian civilization, would subsequently be picked up by temperance movements. A key figure in women's history in Canada, Emily Murphy, would play a leading role in the 1920s in articulating this apocalyptic vision. Murphy, a writer and journalist, was president of the Canadian Women's Press Club (1913-1920), the founding president of the Federated Women's Institute and a member of the National Council of Women of Canada before becoming a judge in Alberta. She also fought to have women's rights recognized in the Canadian constitution. She was a tireless fighter in the war on drugs. In a series of articles published in *MacLean's* magazine in 1920, she attacked the "plague" of drugs.

*[...] whatever form these drugs are taken, they degrade the morals and enfeeble the will. No matter what their status has been, inveterate users of drugs become degraded. All are liars: nearly all become dishonest. Being deprived of the drug, they will go any length to get it, even to thievery and prostitution. While sober they are uncomfortable, and prolonged abstemiousness hurts them like nails driven into the flesh.*⁵

³ Quoted in Giffen, P.J., *op. cit.*, page 61.

⁴ Quoted by McKenzie King in Hansard, House of Commons, January 26, 1911, pages 2641-2642.

⁵ Murphy, E., (1920), "The underground system", *MacLean's*, March 15, 1920.

In 1922, in her book *The Black Candle*, she also attacked marijuana, which she described as follows:

Persons using this narcotic smoke the dried leaves of the plant, which has the effect of driving them completely insane. The addict loses all sense of moral responsibility. Addicts to this drug, while under its influence, are immune to pain, and could severely injured without having any realization of their condition. While in this condition they become raving maniacs and liable to kill or indulge in any form of violence to other persons, using the most savage methods of cruelty without, as said before, any sense of moral responsibility. When coming under the influence of this narcotic, these victims present the most horrible condition imaginable. They are dispossessed of their natural and normal will power and their mental is that of idiots. If the drug is indulged in any great extent, it ends in the untimely death of the addict.⁶

Beyond the verbal impact of these articles and racism toward Asians, there is some similarity between the messages being conveyed at that time and some contemporary messages about drugs: drugs attack the moral roots of society, the family in particular. They put young people at risk and cause crime and violence. Dealers are everywhere, especially around schools, ready to do whatever it takes to expand their client base. And drugs, by definition, lead to drug addiction.

That does not mean, of course, that the newspaper articles were the main reason why drugs were criminalized. Nor does it mean that people ultimately believed what was written. Still, analysts of the evolution of drug laws in Canada agree that the media played an important role in shaping Canadian drug legislation.

Where do Canadian media stand on drugs today? We did not analyse all the press coverage of drugs in Canada, although the exercise would probably have been interesting in sociological terms in identifying key notions and seeing just how public opinion is shaped. All we do here is examine two main types of media article. The first is news related to criminality, the second, feature stories and editorials.

News stories on illegal drugs usually focus on police operations: raids, seizures, dealer arrests and dismantling of organized crime rings. The best-known modern example was surely the 2001 arrest in Quebec of more than 70 Hells Angels members known to be involved in narcotics trafficking and other illegal activities. And then there are seizures, month after month, of kilograms – even hundreds of kilograms – of drugs, more and more often marijuana.

We do not know how this information helps shape public opinion on drugs or what impact it has on the public's demands concerning drugs. However, these articles probably give people the impression that the “drug problem” is first and foremost an organized crime problem. But while there may have been an impression until the mid 1980s, shall we say, that marijuana was a problem exported into Canada from other countries, the growing number of articles on raids of domestic producers – as opposed

⁶ Murphy, E., (1922) *The Black Candle*. Toronto: Thomas Allans, pages 332-333.

to shipments from overseas – is giving more and more people cause to think of marijuana as a home-grown problem.

Other news stories focus on the relationship between drugs and crime, especially prostitution, residential break-ins, and “incivilities” experienced by street youth and the homeless. Some of these activities are at least in part associated with drugs. For prostitution, it is the fact that people, mostly women, are forced to work as street prostitutes in order to support their habit. Residential break-ins are also tied to supporting drug habits, although the perpetrators are different: most break-ins are committed by young men. For street youth, the main problem is intravenous drug use and the risk of spreading AIDS. None of this is directly related to marijuana. Except for schools. Virtually every big city in Canada – and every not-so-big city, too, for that matter – has seen some kind of police operation in schools. School raids usually elicit two types of reaction, both rooted in indignation: people are indignant when they learn that drugs are so much a part of the school environment while others think the police are abusing their authority and failing to respect young people’s rights.

Several years ago, there were a number of feature reports in newspapers and the electronic media. The series written by journalist Dan Gardner of the *Ottawa Citizen* in 2000, which was picked up by most of the newspapers in the Southam chain, is surely the best-known example. In his 10-article series, Gardner explained why the “war on drugs” is a patent failure. He began his series as follows:

Uncle Sam’s global campaign to end drug abuse has empowered criminals, corrupted governments and eroded liberty, but still there are more drug addicts than ever before. On June 6, 1998, a surprising letter was delivered to Kofi Annan, secretary general of the United Nations. ‘We believe’ the letter declared, ‘that the global war on drugs is now causing more harm than drug abuse itself. The letter was signed by statesmen, politicians, academics and other public figures. Former UN secretary general Javier Perez de Cuellar signed. So did George Shultz, the former American secretary of state, and Joycelyn Elders, the former American Surgeon General. Nobel laureates such as Milton Friedman and Argentina’s Adolfo Perez Esquivel added their names. Four former presidents and seven former cabinet ministers from Latin American countries signed. And several eminent Canadians were among the signatories. The drug policies the world has been following for decades are a destructive failure they said. Trying to stamp out drug abuse by banning drugs has only created an illegal industry worth \$400 billion U.S. ‘or roughly eight per cent of international trade.’ [...] This powerful statement landed on Mr. Annan’s desk just as the United Nations was holding a special assembly on global drug problems. Going into that meeting, the governments of the world appeared all but unanimous in the belief that the best way to combat drug abuse was to ban the production, sale or possession of certain drugs. [...] Still, the letter to Mr. Annan showed that this view is far from unanimous. In fact, a large and growing number of world leaders and experts think the war on drugs is nothing less than a humanitarian disaster.⁷

⁷ Gardner, D., “Why the war on drug has failed: Uncle Sam’s war”, *Ottawa Citizen*, September 5, 2000.

In a way, Gardner's series echoed editorials that ran in the *Ottawa Citizen* in 1997 calling for the decriminalization of drugs.⁸ The following appeared in the second article in the series: *"The recent history of drug enforcement, in both Canada and the United States, is largely a record of failure. Tax dollars are lavished on enforcement. Police powers are expanded at the expense of civil liberties. Criminal gangs grow richer. And drug use goes on regardless."*

In 1998, the *Toronto Globe and Mail* expressed a similar view under the headline *"What are G8 Leaders Smoking?"* The newspaper wrote, *"Prohibition does not work and cannot work, and its costs are higher than those of a policy of properly supervised and regulated access to drugs. Given that the elimination of drugs from our society is not an option, the G8 leaders should have been asking themselves how they can minimize the harm that drugs represent. As it is, their policies maximize the damage."* The *Globe and Mail* did the same thing in a two-part editorial in July 2001, recommending decriminalization of marijuana. The *Vancouver Sun* followed suit in October 1998, and the *National Post* also called for an end to the prohibition on marijuana. More recently still, in the wake of the tragic events of September 11, 2001, the *Citizen* editorial staff responded to those who suggested that money from drug trafficking was being used to finance terrorism. The editorial read:

The latest drug-war scare, from Solicitor General Lawrence MacAulay and others, is that terrorists may be using drug money to finance their evil deeds. If so, you can see why. Terrorism, like any real crime, produces victims rather than satisfied customers, so it's not exactly self-financing. The drug trade, by contrast, turns a regular profit because it involves transactions so mutually satisfactory that buyers and sellers will risk jail to conduct them. [...] In short, the drug war not only brings the law into contempt and threatens public safety, it also funnels money to terrorists and helps them move between countries. And people want more of it? I say a virtuous choice must be a choice to be virtuous, so I'd repeal the drug laws on moral grounds. But put aside my distaste for paternalism. If fighting the war on drugs increases the danger of losing the war on terror, surely it's doing far more harm than good.⁹

These editorials and features are interesting for many different reasons. First, they mark a major shift from the positions that were more tentative or simply favoured prohibition that had held sway since the beginning of the century. They were also part of a constant questioning of the government's role and the appropriateness of government spending and reflected growing concern for individual freedoms.

We do not know how they affect public opinion. We are not in a position to say if they reflect views held widely among the public or whether they are skewed. Only one thing strikes us as relatively certain: most major media outlets in Canada have distanced themselves quite significantly from prohibitionist policies.

⁸ Editorial, "Decriminalizing Drugs", *Ottawa Citizen*, April 12, 1997, April 14, 1997, April 15, 1997, and April 16, 1997.

⁹ John Robson, "How many burbs must the drug war burn, before we call it a bust?", *Ottawa Citizen*, May 17, 2002.

SURVEYS

According to one of our witnesses:

From public opinion data assembled over the last 10 years, some by Health Canada, we know that more than two thirds of Canadians think that no one should go to jail for cannabis use, and approximately half of Canadians explicitly advocate the decriminalization or depenalization of cannabis use. This has been consistently the case over the last 25 years. In other words, there has been a public opinion message for a quarter of a century that so far has been ignored by lawmakers and policy-makers.¹⁰

One of the biggest limitations of opinion polls is their superficial nature: the questions are often inserted into more general surveys covering a variety of subjects, there is little opportunity to ask multiple questions, and the meaning of the terms is rarely explored. For example, the terms “legalization” and “decriminalization” do not necessarily mean the same thing to all respondents. But general surveys are not able or rarely have the means to bring those differences to light. If the survey asks a single question about marijuana along the lines of “are you in favour of decriminalizing the possession of small quantities of marijuana?”, there is no way of knowing what the respondents think when they hear “decriminalizing” and “small quantities”. For some, decriminalization may mean no penalty; for others, it may mean a fine. And the difference between 5 grams and 30 grams is enormous.

Like the media, and in an equally complex way, surveys help shape public views. And also like the media, it is hard to determine the role they play in changing attitudes and, more importantly, behaviour. With those reservations out of the way, we provide in the following paragraphs a sample of data from a number of different surveys.

In the 1994 national survey on alcohol and drugs, the respondents were asked to give their opinion on marijuana: 27% said that possession of small quantities should be legal; 42% said it should be illegal but should not result in a penalty or should result in a fine only; and 17% said that possession of marijuana should lead to a possible prison sentence for a first offence. Men and younger people are more inclined to favour legalization of marijuana, as are residents of British Columbia, Quebec, Alberta and Ontario.¹¹

In 2000, the *National Post* reported the results of a survey which showed that almost two thirds of Canadians were in favour of decriminalizing marijuana and that the punishment for possession of small quantities for personal use should be a fine.¹²

¹⁰ Dr. Benedikt Fischer, Professor, Department of Public Health Sciences, University of Toronto, testimony before the Special Senate Committee on Illegal Drugs, Senate of Canada, First Session of the thirty-seventh Parliament, September 17, 2001, Issue 6, page 13.

¹¹ Canadian Centre on Substance Abuse (1999), *Canadian Profile, 1999: Alcohol, tobacco and other drugs*, Ottawa: author, pages 214-215.

¹² National Post, “Two-thirds favour decriminalizing pot”, May 15, 2000.

More recently still, in a May 2001 survey, 47% of Canadians said they favour legalization of marijuana, up from 31% in 1995 and 26% in 1975.¹³

A smaller survey of public perceptions was conducted in Quebec in 2001 using a sample of 2,253 respondents (response rate 70%).¹⁴ The survey focused solely on drugs, drug addiction and HIV and measured knowledge, perception of risk, perception of drug addicts, and possible policies and measures. What makes this type of study interesting is that because the questions were limited to drug addiction and drugs, it provides clearer and more comprehensive information on certain issues.

The study showed that the majority (66%) of Quebecers think that drug use is increasing. It also showed that “[translation] *marijuana is in a class of its own*” in terms of perception of risk because “[translation] *only one in four people felt that marijuana is dangerous the first time it is used, which is less than the opinion reported for tobacco, even though tobacco is legal. Moreover, marijuana is the only substance that a relatively large number of respondents described as never harmful to health. [...] People consider it less dangerous than tobacco.*”¹⁵ The surveys also show that marijuana is the substance least likely to lead to addiction: approximately 15% of respondents think that marijuana creates a dependency the first time it is tried, whereas more than 40% said it would have to be used every day and 8% said that marijuana never creates dependency.¹⁶

As to opinions on public policy, the study showed a clear preference for prevention and education over controls and repressive measures. Almost 35% of those asked what measures would be likely to eliminate drug problems said that the controlled sale of marijuana and hashish would help reduce the adverse effects. According to the authors, the public “[translation] *is very open to some form of legalization of hashish and marijuana. More than 90% said that people with certain serious illnesses should be allowed to get prescription hashish and marijuana in order to relieve their pain. Far fewer people, although still a majority (60%), would be willing to allow those drugs to be used under certain conditions perhaps like alcohol.*”¹⁷ Fewer than 40% thought that current laws help prevent people from using (and approximately 60% disagreed somewhat or completely with that statement).¹⁸

¹³ Julian Beltrame, “Reefer Madness: The Sequel”, *MacLean's*, August 6, 2001, Vol. 114, pages 22-25.

¹⁴ Hamel, D., et al. (2001), *Perceptions de la population québécoise en lien avec les programmes de prévention de la toxicomanie et du VIH*, [public perceptions in Quebec regarding substance abuse and HIV prevention programs], Quebec City: Institut national de santé publique du Québec.

¹⁵ *Ibid.*, page 3.

¹⁶ *Ibid.*, page 27.

¹⁷ *Ibid.*, page 4

¹⁸ *Ibid.*, page 38.

In Ontario, the school survey also looked at students' perception of risk and disapproval of marijuana use. The results are shown in the following table.

Perceptions of Ontario high-school students, 1989-2001¹⁹

	1989	1991	1993	1995	1997	1999	2001
Disapprove of experimentation							
Total	40.8%	43.2%	37.1%	28.8%	23.4%	26.0%	28.6%
Grade 7	58.9%	58.0%	48.6%	44.9%	40.8%	44.3%	48.2%
Grade 9	38.0%	48.3%	38.8%	30.1%	21.6%	25.7%	23.7%
Grade 11	33.0%	32.5%	30.2%	16.3%	13.2%	18.2%	19.4%
Grade 13	26.7%	28.4%	27.7%	25.7%	18.8%	13.4%	20.7%
Disapprove of regular use							
Total	61.0%	60.8%	55.9%	47.2%	45.2%	43.1%	41.7%
Grade 7	73.7%	72.1%	66.6%	62.3%	58.7%	63.6%	64.0%
Grade 9	59.8%	62.5%	54.3%	48.6%	41.1%	43.6%	34.3%
Grade 11	54.9%	52.4%	50.9%	33.6%	30.9%	31.2%	29.8%
Grade 13	50.1%	56.1%	51.1%	48.6%	42.6%	32.8%	40.7%
Associate high risk with experimentation							
Total	27.8%	30.7%	27.3%	18.5%	17.1%	18.4%	18.6%
Grade 7	39.2%	37.0%	35.3%	30.7%	26.2%	28.4%	27.0%
Grade 9	29.7%	35.4%	29.3%	18.6%	14.3%	16.6%	18.5%
Grade 11	18.0%	25.2%	21.8%	10.5%	12.8%	15.2%	11.1%
Grade 13	19.2%	21.2%	19.7%	14.2%	16.4%	12.5%	17.7%
Associate high risk with regular use							
Total	75.4%	73.3%	69.3%	58.1%	56.1%	52.0%	48.2%
Grade 7	72.6%	72.1%	69.8%	67.6%	60.5%	63.6%	61.1%
Grade 9	79.1%	74.0%	73.7%	60.8%	59.3%	53.1%	47.8%
Grade 11	74.7%	73.9%	66.9%	50.8%	49.4%	44.9%	36.8%
Grade 13	73.3%	73.1%	63.4%	50.6%	55.7%	45.2%	47.8%

These results show that Ontario high-school students' attitudes on all indicators are either less alarmist or more liberal, depending on one's point of view. Fewer students disapproved of experimentation (one or two times) with marijuana and regular use in 2001 than in 1989. However, more students still disapproved of regular use than occasional use. The level of disapproval decreases as level of schooling increases. Further, fewer Ontario students associated a high risk with marijuana use in 2001 than in 1989, but still almost three times as many associated a high risk with regular use than with experimentation. It bears noting that students who associate a high risk with

¹⁹ Adlaf, E.M., and A. Paglia (2001), *Drug Use among Ontario Students 1977-2001. Findings from the OSDUS*, Toronto: Centre for Addiction and Mental Health.

regular marijuana use now make up less than half the student population, down from three quarters in 1989.

By and large, these data are in line with the results of the study the Committee commissioned from the firm Léger Marketing.²⁰ The objective of this qualitative study using focus groups was to determine whether it was possible to identify elements that could serve as the basis of a social consensus on the use of cannabis. More specifically, the study was designed to determine the overall perception of drug use in general and cannabis in particular; the images associated with cannabis; attitudes and social behaviour toward the use of cannabis for recreational purposes; fears and prejudices; knowledge of the legislative framework; and the expectations of citizens with regard to a public policy on the use of cannabis for recreational purposes. Léger held 16 focus groups and conducted 15 in-depth interviews in Montreal, Trois-Rivières, Halifax, Winnipeg, Vancouver, Toronto and London. In all, more than 130 people took part in the study. In each city, there were at least two focus groups, one with adults over the age of 18, and one with youth 14 to 17 years of age.

The participants in the focus groups did not spontaneously mention drugs as everyday concerns; they reported being more concerned about health, education, employment and poverty. When the subject was raised by the interviewers, the participants first named crime related to the sale of drugs and drug smuggling as primary concerns, not drug use by Canadians. In some cities (Montreal, Vancouver), the participants also voiced concern about the impact illegal drugs have on quality of life and safety in some neighbourhoods.

Questioned about marijuana, almost all of the participants spontaneously made a distinction between soft drugs (marijuana, hashish) and hard drugs (cocaine, heroin); some even thought the word “drug” was inappropriate in reference to marijuana. That distinction is based on two major elements: composition and effect. Hard drugs are more closely associated with chemical products that have destructive effects, particularly a greater tendency to develop an addiction. Marijuana and marijuana derivatives are associated with plants or natural products, and the risk of dependency is virtually nil, except among people who are especially predisposed or vulnerable. There were many comparisons with alcohol: alcohol can be used in reasonable quantities without a problem, and only a small proportion of users develop dependency problems. Nor was marijuana associated with crime: *“I can’t picture a guy robbing the corner store to buy himself a joint. This is something heroin addicts would do. First, pot is cheap, second it doesn’t make you want it desperately.”* The only exception more common in Quebec than elsewhere was the association with organized crime, that is, motorcycle gangs.

In contrast to “hard” drugs, which are considered part of a world of moral and physical distress and social decay, the participants generally associated marijuana with relaxation and pleasure, a drug used primarily in social settings, like alcohol.

²⁰ Léger Marketing (2002), *An Exploratory Study Among Canadians About the Use of Cannabis*, Montreal: author. Available on line at the Committee’s site.

In any event, recreational use of marijuana was generally well accepted: *"it doesn't bother me that people do marijuana. As long as they are aware of their decision and what they are doing, I respect it."* In fact, several participants in each group spontaneously mentioned their own past or current experiences with marijuana use: *"I sometimes smoke pot and it doesn't keep me from being a productive guy at work or a good family man."* And like alcohol, the difference lay more in the notions of abuse and responsibility, although the participants were harder on alcohol abuse, which they associate with violence. *"I used to go out to bars a lot. Every night there would be a fight. A guy gets drunk and then starts insulting somebody else or feels another is flirting with his girlfriend. At one point punches get thrown around. But you know what? I have never seen a guy stoned on pot go nuts and want to knock somebody out."* While they did not associate marijuana use with violence or crime, the participants did express concern about people's behaviour when under the influence of marijuana. Finally, the participants did not associate marijuana use with a particular social class: young people use marijuana, but so, too, do professionals, artists, lawyers, government employees and others.

The researchers did not observe any generational differences in recreational use of marijuana. If there were a difference, it would be rooted more in socio-occupational features: people with less education and people in rural areas appear to be more resistant. Further, people who oppose recreational use of marijuana do so more for moral and sometimes even religious reasons. Another difference is that women with school-age children said they were very concerned about how readily available marijuana is in schools. [translation] *"I don't care if they legalize it or not. All I want is for marijuana to be kept away from children. It makes me furious that they sell it in primary school, because that gets them hooked at a very young age."*

As the public opinion surveys discussed earlier showed, the participants generally supported the legalization of marijuana for medical use. However, some of the respondents said they would like to see a clear distribution structure put in place in health care establishments and that dosages should be geared to the intensity of the pain.

Generally, the participants felt that occasional use had no adverse health effect. Spontaneously making a comparison with alcohol and tobacco, they felt that marijuana was not the most dangerous of the three substances. Further, most of the respondents were not afraid of people getting hooked on marijuana, noting that dependency is a function of the person's maturity and frequency of use. *"This is the key question. I don't think you can get hooked on it really. Not as much as booze or nicotine for sure. But that's the kind of proof or medical evidence I would like to have if you want me to make up my mind on it."* The participants also did not think that marijuana is a gateway to other drugs or "hard drugs", because the user's personality and maturity have more influence than the marijuana itself.

The interview guide asked the participants to react to two research findings: the proportion of Canadians who have used marijuana in the past 12 months is approximately 10%, and about 30,000 charges are laid a year for simple possession of

marijuana. In both cases, the participants were incredulous. Regarding the proportion of users, all the participants felt that there were far more: “[translation] *I’m surprised that only 10% of the population are users. I would have said 50% or 60%.*” Regarding the number of charges, the participants unanimously felt that police should focus more on fighting crime rings: “*30,000 people charged per year seems like a waste of taxpayers’ money, if it is just for possession. It’s a lot of money to prosecute and they all get thrown out anyway.*” [translation] “*When you think about other, more serious crimes, when you think how it clogs up the courts, I think it’s ridiculous.*” Nevertheless, the participants felt that Canada is a relatively tolerant society when it comes to recreational use of marijuana, at least in comparison with other countries, and spontaneously named the United States and Saudi Arabia as repressive and Switzerland and the Netherlands as tolerant; Canada fell somewhere in between.

The interviews were conducted after the Committee released its discussion paper in which it set out a number of public policy options. The focus group participants were first urged to freely voice their opinions on the public policies they would prefer to see and were then presented with the Committee’s proposals and asked to react.

By and large, the response from the participants fell somewhere between decriminalization and legalization. That position was most prevalent in Montreal, Toronto, Vancouver and Halifax; more participants in Vancouver and Montreal favoured legalization with government controls: “*The best option is decriminalization leaning towards government legalization. The worst option would be depenalization: to legalize without getting involved.*” According to the participants, those options would make it possible to increase the ability to provide information about risk, user health, public safety, respect for individual rights and freedoms, and the effectiveness of government spending, and would reduce illegal trafficking and the involvement of organized crime. They also said they would anticipate an increase in recreational use of marijuana but did not think that there would necessarily be an increase in use or abuse among young people. On the contrary, several participants felt that decriminalization would lead to a decrease in use among young people because the appeal of the forbidden fruit would be gone.

There is still a hard-core minority who think that current laws are not harsh enough and that society should move toward greater criminalization of recreational use of marijuana. That position was voiced most loudly in Winnipeg among persons over 40 and in Trois-Rivières.

Finally, the participants said they would like to be informed and “educated” about marijuana use and in particular would like to be made aware of scientific knowledge of the short- and long-term effects, the real risk of dependency and escalation, ways of protecting children against early use, and the impact of decriminalization on the war on organized crime.

The authors of the study identified the following key factors:

- the protection of youth and children is central to any discussion of a public policy on marijuana;

- decriminalization of use is the preferred option, as it would make it possible to recognize the social reality and at the same time focus on the “real” problems;
- some participants expressed support for legalization but wondered about the nature and control of production and quality standards, methods of distribution and marketing, and the establishment of quotas in order to prevent abuse.

Because this was a qualitative survey, we cannot extrapolate the results to the entire Canadian population. Our financial resources did not allow us to conduct a comprehensive study using a representative sample of the population, which would have allowed us to validate these “hunches”. Still, we are able to state the following: 1. these results are similar in many ways to the data from the opinion polls; and 2. the commonalities between the focus groups in most of the cities and between age groups suggest there is some validity to these hunches.

ATTITUDES AND OPINIONS SHARED WITH THE COMMITTEE

Hundreds of Canadians from all over the country wrote to us, and dozens appeared at our public hearings in the regions. They came to recount their personal experiences, state their opinions and voice their fears. They represented rights and freedoms advocacy groups, compassion clubs, which distribute medical marijuana, treatment and prevention organizations, and women’s groups. They were mayors, police chiefs, users of medical marijuana, parents, educators, physicians, lawyers and recreational marijuana users, young and old alike. They often spoke from the heart, and we were moved by what they said. Appendix 2 is a list of all the people the Committee heard during its public hearings. We would like to thank all those who took part in our proceedings.

It is impossible to present in this report all the contributions to our discussions and highlight their extraordinary worth. Fortunately, the transcripts of the hearings will remain on our Internet site. The following will summarize the opinions conveyed to us in reaction to our discussion paper.

We should point out first of all that the people who shared their views were for the most part very happy with the diligence of our work and, more specifically, were very appreciative of the opportunity they were given to take part in this social debate.

I have followed with great interest the proceedings of the Special Committee on Illegal Drugs and would like to thank the person who decided to publish the brief so completely and honestly. This speaks volumes of transparent government, which is a key element in resolving the debate.

I would first of like to commend the Senate for its Special Committee on Illegal Drugs and its impartial and ground-breaking work on marijuana.

Thank you for taking the time to review my submission. I would like to commend the Senate Committee on Illegal Drugs for its excellent research on the facts and criticism of the myths surrounding illegal drugs.

First of all, I would like to thank the Committee for skilfully separating the facts from the propaganda surrounding this issue. [...] Thank you for taking the time to get public input on the issue. I only hope that this will not fall on deaf ears as was the case with the Le Dain Commission before you. Again, I believe the Committee is trying to do its best for the people of Canada.

I read your discussion paper on marijuana and the accompanying documentation and found the material to be most interesting. I would like to commend you for your willingness to launch a public debate in this area of policy.

Most of the people who took the time to respond to us also said they found the discussion paper to be well done, useful and balanced. Moreover, the respondents said they agreed with the research data we presented in the paper. Where there were reservations, they pertained to:

- biased interpretation of the data: for some people, marijuana is unquestionably a gateway drug;
- an overly cautious side: saying that marijuana is a drug and therefore should not be used was perceived as “politically correct”;
- a lack of compassion and concern for youth and children.

Many Canadians from different walks of life shared with us their concerns about the prospect of marijuana being decriminalized and about the message that that kind of decision would send to young people.

[Translation] It doesn't make any sense to use to legalize a drug with all the question marks and solid facts that are seen as consequences of marijuana use. If we had to do it over again, I don't think with the information we currently have that we would want to legalize nicotine or even alcohol. Once we consider legalizing a drug, we can assume that the drug will become more readily available and that there will therefore be more use and more problems. Remember: marijuana is not harmful because it is illegal; marijuana is still illegal because it is harmful.²¹

Informed public debate is healthy and valuable, but it requires exposure to a full range of viewpoints. Regrettably, this is not the case in regard to the non-medical use of drugs. Rather, we have had constant and copious representation of the view that the only way to deal with the drug problem is to accept its inevitability and even its normalcy. (...)

²¹ Brief from A. Maillet and C. Cloutier-Vautour to the Special Senate Committee on Illegal Drugs, Moncton, June 5, 2002.

*In discussion about drug strategies, the harm of illegal drugs is usually identified, not with the drug's intrinsic chemical effects on the human body, especially on brain function and behaviour, but rather on extrinsic consequences of the illegality of the drug. Thus, the general havoc wreaked on the lives of addicts and their families is ignored in favour of deploring the harm that a criminal record can do to self-esteem. Further, the property crime and violence carried out by drug users are attributed to the illegality of the drugs rather than to the diminished work habits and lack of earning capacity which result from drug use.*²²

*Our concerns with the Discussion Paper released by the Committee centre primarily on cannabis policies and the resulting effects on youth and families. (...) We suggest to the Committee that rather than focusing on reforming our drug laws, efforts would be much better spent on examining strategies focused on prevention. (...) Much rhetoric exists around the supposed 'war on drugs': have we lost the war, what do we do now and were we really fighting a war to begin with? The challenge presented to this Committee is not an easy task: to recommend workable, feasible policies regarding cannabis use. To this end, we trust that the Committee will be prudent in its decisions, innovative in its policy recommendations and resistant to the urge to simply give sway to 'hemp mania'. We owe it to our young people.*²³

*Please, ladies and gentlemen, please do not just rely on research and the experts. There are many well-financed documents and experts that are paid to promote legalization. THC, the active ingredient of cannabis can be taken in pills, we do not have to promote smoking in another form. [...] If I could suggest the following: 1. Provide more treatment resources and services; 2. Change our system of incarceration when it comes to drug-induced crime – mandatory treatment; and 3. Have our country adopt a zero tolerance to illegal drugs and provide the ability to our police to enforce the policy and mandate our courts to address the issue. Please do not provide another avenue for our children to escape reality.*²⁴

That said, most of the people who responded to the questionnaire also said they were in favour of decriminalization or controlled legalization of marijuana and marijuana derivatives. For that reason, we have to be very careful still regarding the meaning of the comments we received: most of those who wrote to us are probably interested, for personal reasons, in seeing the current legislation amended to introduce more tolerance. That view probably coloured their assessment of our discussion paper and the quality of our research findings.

²² Brief from Real Women, submitted to the Senate Special Committee on Illegal Drugs, June 6, 2002, pages 1-2.

²³ Brief from Focus on the Family to the Special Senate Committee on Illegal Drugs, Richmond, May 14, 2002.

²⁴ Letter from Kathy Bedard, Prince Rupert, British Columbia, May 15, 2002.

CONCLUSIONS

What is the status of public opinion in Canada? We are not able to come up with firm answers to that question. We do think, however, that:

Conclusions of Chapter 10	
Opinions on marijuana	<ul style="list-style-type: none"> ➤ Public opinion on marijuana more liberal than it was 10 years ago. ➤ Tendency to think that marijuana use is more widespread than it used to be. ➤ Tendency to think that marijuana is more available than it used to be. ➤ Tendency to think that marijuana is not a dangerous drug. ➤ Relatively significant concern about organized crime. ➤ Strong support for medical use of marijuana.
Opinions on public policy options	<ul style="list-style-type: none"> ➤ Tendency to favour decriminalization or, to a lesser degree, legalization. ➤ Critical attitude toward law enforcement for simple possession of marijuana. ➤ Concern for youth and children.

Sénat



Senate

CANADA

LE CANNABIS : *POSITIONS POUR UN RÉGIME DE POLITIQUE PUBLIQUE POUR LE CANADA*

**RAPPORT DU COMITÉ SPÉCIAL DU SÉNAT
SUR LES DROGUES ILLICITES**

VOLUME I : PARTIES I ET II

PRÉSIDENT

PIERRE CLAUDE NOLIN

VICE-PRÉSIDENT

COLIN KENNY

SEPTEMBRE 2002

ORDRE DE RENVOI

Extrait des Journaux du Sénat du 15 mars 2001 :

Reprise du débat sur la motion de l'honorable sénateur Nolin, appuyée par l'honorable sénateur Molgat,

Qu'un comité spécial du Sénat soit formé afin de faire rapport sur :

- l'approche du Canada concernant le chanvre indien (cannabis), ses préparations et dérivés et les préparations synthétiques semblables, en contexte;
- l'efficacité de cette approche, les moyens de sa mise en oeuvre ainsi que le contrôle de son application;
- les politiques officielles pertinentes adoptées par d'autres pays;
- le rôle et les obligations internationales qui incombent au Canada en vertu des conventions des Nations Unies sur les stupéfiants relativement au cannabis, de la Déclaration universelle des droits de l'homme et d'autres traités connexes;
- les effets sociaux et sanitaires du cannabis et les effets possibles de politiques différentes;

Que le comité spécial soit composé de cinq sénateurs dont trois constituent le quorum;

Que les honorables sénateurs Banks, Kenny, Nolin et Rossiter (le cinquième membre sera nommé par le whip en chef du gouvernement) soient nommés au comité;

Que le comité ait le pouvoir de faire comparaître des personnes et produire des documents, d'entendre des témoins, de faire rapport au besoin et de faire imprimer au jour le jour documents, mémoires et témoignages selon les instructions du comité;

Que les mémoires reçus et les témoignages entendus lors de l'examen du projet de loi C-8, *Loi portant sur la réglementation de certaines drogues et de leurs précurseurs ainsi que d'autres substances, modifiant certaines lois et abrogeant la Loi sur les stupéfiants en conséquence* par le Comité sénatorial permanent des affaires juridiques et constitutionnelles durant la deuxième session de la trente-cinquième législature, soient envoyés au comité;

Que les documents et les témoignages recueillis sur le sujet par le Comité spécial sur les drogues illicites du Sénat durant la deuxième session de la trente-sixième législature soient envoyés au comité;

Que le comité soit habilité à autoriser, s'il le juge opportun, la radiodiffusion, la télédiffusion et la diffusion par les médias électroniques de la totalité ou d'une partie de ses délibérations et des informations qu'il détient;

Que le comité présente son rapport final au plus tard le 31 août 2002 et qu'il conserve les pouvoirs nécessaires à la diffusion de ses constatations pendant trente jours après le dépôt de son rapport;

Que le comité soit autorisé, indépendamment de l'usage habituel, à déposer son rapport auprès du greffier du Sénat si le Sénat ne siège pas, et que le rapport soit réputé avoir été déposé au Sénat.

Après débat,

La motion principe, telle que modifiée, mise aux voix, est adoptée.

Extrait des Journaux du Sénat du 9 mai 2002 :

L'honorable sénateur Nolin propose, appuyé par l'honorable sénateur Stratton,

Que la date de présentation du rapport final du Comité spécial du Sénat sur les drogues illicites au sujet de son étude de réexaminer des lois et des politiques antidrogue canadiennes, autorisée par le Sénat le 15 mars 2001, soit reportée du 31 août 2002 au 13 septembre 2002.

La motion, mise aux voix, est adoptée.

ATTESTÉ :

Le greffier du Sénat,

Paul C. Bélisle

REMERCIEMENTS

Je suis très fier du rapport sur le cannabis que le Comité spécial du Sénat sur les drogues illicites rend aujourd'hui public. Ce rapport marque une étape dans la politique publique canadienne sur les drogues et je ne doute pas que, malgré son volume imposant, il trouvera plus d'un lecteur attentif.

Ce rapport est le fruit de deux années d'un travail collectif. Au risque d'oublier certaines personnes qui me pardonneront, je veux exprimer ici ma reconnaissance pour les contributions de ceux et celles qui ont été associés le plus près à nos travaux.

Je tiens d'abord à remercier l'ensemble des Canadiens et Canadiennes qui, de près ou de loin, ont participé à nos travaux, en nous écrivant, en assistant à nos audiences et à nos débats publics dans les régions, en nous regardant à la télévision, et tout simplement en s'informant sur cette question importante de politique sociale. Leur apport, leurs questions, leurs commentaires, nous ont été source d'inspiration. Nous n'oublierons pas non plus l'accueil que nous ont fait les Chefs de la tribu des Piapot en Saskatchewan; la cérémonie qu'ils nous ont offerte a été un véritable ressourcement.

Le travail du Comité n'aurait pas été possible sans l'immense contribution de son équipe de recherche. Cette petite équipe a été habilement dirigée par le Dr Daniel Sansfaçon, sociologue, dont la rigueur et le dévouement ont permis au Comité d'atteindre les plus hautes exigences de qualité pour l'ensemble de ses travaux et la rédaction de son rapport. À ses côtés, Monsieur Gérald Lafrenière et Madame Chantal Collin, analystes à la Direction de la recherche parlementaire de la Bibliothèque du Parlement, ont été des collègues inestimables. Qu'il me soit d'ailleurs permis de remercier explicitement la Direction de la recherche parlementaire et son directeur général qui ont répondu avec diligence et professionnalisme à notre imposant programme de recherche. Enfin, je veux souligner les contributions de Madame Barbara Buston Wheelock, assistante auprès de la Sénatrice Rossiter, de Monsieur François Dubois, mon assistant de recherche, ainsi que de Messieurs Jean-Guy Desgagné et David Newman aux communications.

Les travaux du Comité ont bénéficié de l'expertise et de la générosité des nombreux experts qui sont venus témoigner ou que nous avons rencontrés à titre privé et dont on trouvera la liste en annexe. Je voudrais les remercier tous et chacun.

Nous avons aussi pu compter sur la compétence des greffiers de comités et l'efficacité de leur personnel administratif pour l'organisation de nos multiples réunions de travail et réunions publiques. Je voudrais remercier messieurs Blair Armitage, Daniel Charbonneau et Adam Thompson.

Notre rapport, marqué par un grand souci de transparence et de rigueur, témoigne des plus hauts standards que le Sénat du Canada sait maintenir. Je voudrais d'ailleurs remercier mes collègues du Sénat qui nous ont accordé leur confiance en nous confiant ce mandat. En terminant je voudrais témoigner ma reconnaissance à mes collègues qui ont participé à nos travaux et tout spécialement à chacun des membres du Comité spécial du Sénat sur les drogues illicites, son vice-président, le sénateur Colin KENNY, et les sénateurs Tommy BANKS, Shirley MAHEU et Eileen ROSSITER. Ils ont fait un travail remarquable.

Collègues, je crois que les Canadiens ont raison d'être fiers de notre institution parlementaire.

Pierre Claude NOLIN

Sénateur

Président du Comité spécial du Sénat sur les drogues illicites

MEMBRES DU COMITÉ SPÉCIAL DU SÉNAT SUR LES DROGUES ILLICITES

1. MEMBRES DU COMITÉ SPÉCIAL DU SÉNAT SUR LES DROGUES ILLICITES

L'honorable Pierre Claude Nolin
(Président)

L'honorable Colin Kenny
(Vice-président)

L'honorable Tommy Banks

L'honorable Eileen Rossiter

L'honorable Shirley Maheu

L'honorable John Lynch-Staunton *

L'honorable Sharon Carstairs, c.p. ***

L'honorable Noël A. Kinsella *

L'honorable Fernand Robichaud, c.p.*

2. AUTRES SÉNATEURS AYANT PARTICIPÉ AUX TRAVAUX DU COMITÉ

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L'honorable Laurier LaPierre

L'honorable Pat Carney, c.p.

L'honorable Jean Lapointe

L'honorable Thelma Chalifoux

L'honorable Edward M. Lawson

L'honorable Ione Christensen

L'honorable Lorna Milne

L'honorable Ethel M. Cochrane

L'honorable Yves Morin

L'honorable Pierre De Bané, c.p., c.r.

L'honorable Lucie Pépin ***

L'honorable Consiglio Di Nino

L'honorable Marie-P. Poulin

L'honorable Joyce Fairbairn, c.p.

L'honorable Marcel Prud'homme, c.p.

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L'honorable J. Michael Forrestall

L'honorable Peter A. Stollery

L'honorable Jeremiah S. Grafstein, c.r.

L'honorable Terry Stratton

L'honorable Mobina S.B. Jaffer

L'honorable John Wiebe

L'honorable Lois M. Wilson

* Membres d'office

** L'honorable Sharon Carstairs a été membre du Comité d'avril 2000 à octobre 2000

*** L'honorable Lucie Pépin a été membre du Comité d'avril 2000 à octobre 2000.

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Abus

Terme vague qui reçoit une grande variété de significations, selon les contextes sociaux, médicaux, et juridiques. Selon certains, tout usage de drogues illicites est un abus : ainsi, les conventions internationales considèrent l'usage de toute substance prohibée pour des fins autres que médicales ou scientifiques comme un abus. Le Manuel diagnostique de l'Association américaine de psychiatrie définit l'abus comme un mode d'utilisation inadéquat d'une substance conduisant à une altération du fonctionnement ou à une souffrance cliniquement significative, et suggère 4 critères (voir le chapitre 7 du rapport). Nous lui préférons le concept d'usage excessif (ou usage nocif).

Accoutumance (de l'anglais addiction)

Terme général renvoyant aux phénomènes de tolérance et de pharmacodépendance. Le terme accoutumance est rarement utilisé en français qui utilise plutôt le terme toxicomanie.

Addiction

Certains auteurs utilisent ce terme issu de l'anglais pour désigner le processus par lequel un comportement, pouvant permettre une production de plaisir et d'écarter une sensation de malaise interne, est employé de façon caractérisée par l'impossibilité répétée de contrôler ce comportement et sa poursuite en dépit de la connaissance de ses conséquences négatives. Ces auteurs le préfèrent au concept de dépendance, celui-ci ne permettant pas de travailler sur la période qui précède la dépendance. Nous lui préférons le terme dépendance.

Agoniste

Se dit entre autres d'une substance qui agit sur un récepteur pour produire certaines réponses.

Anandamide

Neurotransmetteur agoniste du système cannabinoïde endogène. Bien que les rôles spécifiques de ces neurotransmetteurs ne soient pas encore définis, ils semblent agir comme des neuromodulateurs ; en effet, le THC augmente la libération de dopamine du noyau accumbens et du cortex préfrontal.

Cannabinoïdes

Récepteurs endogènes des molécules actives du cannabis, notamment le THC. Deux récepteurs endogènes ont été identifiés : CB₁ existent en grande densité dans l'hippocampe, le ganglion basal, les corps cérébelleux, et le cortex cérébral et CB₂, ils sont particulièrement abondants dans le système immunitaire. Les effets centraux du cannabis semblent être exclusivement reliés aux récepteurs CB₁.

Cannabis

Il existe trois variétés de plantes de cannabis, le *cannabis sativa*, le *cannabis indica*, et le *cannabis ruderalis*. La plante de la variété *cannabis sativa* est la plus répandue poussant dans presque tous les sols. La plante de cannabis est connue en Chine depuis environ 6000 ans. À partir des sommités florifères de la plante de cannabis, mais aussi parfois des feuilles, on obtient le tabac à fumer. Sous cette forme, l'appellation la plus courante est le pot, mais on le désigne aussi sous le nom de mari, herbe, dope, ganja. La résine extraite de la plante sert à fabriquer le haschich.

Généralement classifié sous les psychotropes, le cannabis est un perturbateur du système nerveux central. Le cannabis contient plus de 460 produits chimiques connus, dont plus de 60 sont désignés sous le nom de cannabinoïdes. Le principal ingrédient actif du cannabis est le delta-9-tétrahydrocannabinol, communément appelé THC. D'autres cannabinoïdes présents incluent le delta-8-tétrahydrocannabinol, le cannabinal et le cannabidiol mais ils sont présents en faibles quantités et n'exercent pas d'effets significatifs sur le comportement des individus, comparativement au THC. Ils peuvent cependant contribuer à moduler l'effet global du produit. Dans le rapport, nous utilisons le terme cannabis pour désigner l'ensemble des produits, et n'utilisons marijuana ou haschich que lorsque nous désignons ces dérivés spécifiquement.

Commission sur les drogues (CND)

La Commission sur les narcotiques a été créée en 1946 par le Conseil économique et social des Nations Unies. La Commission est le principal organisme d'élaboration de politiques sur les drogues au sein du système onusien. Elle examine la situation mondiale relativement à l'abus de drogues et fait des propositions pour renforcer le contrôle international des drogues.

Conduite (ou usage) à risque

Comportement d'usage qui met la personne à risque de développer des problèmes de dépendance à la substance. La conduite à risque se compose de l'interaction complexe entre au moins quatre facteurs : le contexte d'usage, la quantité consommée, la fréquence de la consommation et la durée et l'intensité de la consommation. (Nous proposons des critères à la conclusion du rapport).

Conventions internationales

Sous l'égide de la Société des Nations en 1908 puis des Nations Unies, diverses conventions internationales réglementent la possession, l'usage, la fabrication, la distribution, le commerce, etc., des substances psychotropes. Les trois principales conventions sont celles de 1961, 1971 et 1988. Le Canada a ratifié ces trois conventions. Ces conventions, dont l'application est assujettie aux lois constitutionnelles des signataires, établissent un système de réglementation où seuls les usages aux fins médicales et scientifiques sont permis. Ce système est axé sur la prohibition des plantes source (coca, opium et cannabis) et sur le contrôle des dérivés synthétiques fabriqués par les compagnies pharmaceutiques.

Décriminalisation

Opération consistant à retirer un comportement de la «compétence» du système de justice criminelle. On distingue habituellement entre *décriminalisation de droit (ou de jure)* impliquant une modification législative du Code criminel (ou de toute loi de nature criminelle) et *décriminalisation de fait (ou de facto)* où il s'agit d'une décision administrative de ne pas poursuivre le comportement qui demeure cependant illégal. La décriminalisation ne concerne que le Code criminel (ou toute loi de nature criminelle), et ne signifie pas que l'on retire la compétence du système juridique dans son ensemble. D'autres lois non criminelles peuvent réguler et contrôler le comportement qui a été décriminalisé (infractions civiles, réglementaires, etc.).

Déjudiciarisation

Réfère aux mesures alternatives à la poursuite ou à la condamnation pénale d'un acte qui demeure par ailleurs prohibé. La déjudiciarisation peut se faire avant la mise en accusation, par exemple si la personne inculpée consent à suivre un traitement. Elle peut aussi se faire au moment de la sanction, et prend alors la forme de sanctions de travail communautaire ou de traitement.

Demi-vie

Temps requis pour la diminution de moitié de la concentration d'une drogue dans le sang. La demi-vie d'élimination du THC est en moyenne de 4,3 jours. Suite au phénomène de tolérance métabolique, les consommateurs réguliers métabolisent et excrètent le produit plus rapidement que les usagers occasionnels. D'autre part, à cause de sa très grande liposolubilité, l'administration répétée du THC provoque son accumulation dans les graisses. Du fait de ce stockage graisseux, la demi-vie d'élimination tissulaire du THC peut atteindre 7 à 12 jours chez les consommateurs réguliers. La consommation prolongée du cannabis se traduit donc par une période d'élimination plus longue du THC. Ainsi, même après une semaine, 20 à 30 % du THC administré et ses métabolites demeurent dans l'organisme. Le THC et ses métabolites sont graduellement excrétés dans l'urine (environ un tiers) et dans les matières fécales (environ deux tiers). Des traces de THC ou de ses métabolites peuvent être détectées dans l'urine jusqu'à 30 jours après sa consommation.

Dépénalisation

Opération consistant à modifier les peines (sanctions) associées à un acte dans le Code criminel. La dépénalisation signifie la plupart du temps le fait d'abroger les dispositions permettant une sanction d'incarcération.

Dépendance

État où l'usager de drogue continue de consommer même si l'usage entraîne des problèmes qui peuvent être d'ordre physique, psychologique, relationnel, familial, ou social. La dépendance est un phénomène complexe qui peut avoir des composantes génétiques. La dépendance psychologique renvoie aux effets psychiques caractérisés par le désir insistant et persistant de consommer la drogue. La dépendance physique renvoie aux mécanismes d'adaptation de l'organisme à la consommation prolongée et peut s'accompagner d'une tolérance acquise. L'Association psychiatrique américaine propose 7 critères (voir chapitre 7).

Dopamine

Neuromédiateur impliqué notamment dans les mécanismes de perception du plaisir.

Drogue

Terme qui renvoie généralement aux substances illicites par opposition à d'autres substances telles l'alcool, la nicotine ou des médicaments psychotropes. En pharmacologie, le terme réfère à tout agent chimique qui modifie les processus biochimiques ou physiologiques des tissus ou de l'organisme. En ce sens, le terme drogue s'applique à toute substance qui est consommée principalement pour ses effets psychoactifs.

Effets aigus

Se dit des effets résultant de l'action ponctuelle d'un médicament et généralement des effets à court terme. Ces effets peuvent être centraux (sur les fonctions cérébrales) ou périphériques (sur le système nerveux).

Effets chroniques

Se dit des effets qui se développent avec le temps, à la suite de la prise ou de l'administration régulière d'une substance. Dans le rapport, nous avons préféré parler des conséquences de l'usage prolongé plutôt que d'effets chroniques.

Escalade (théorie de)

Théorie qui suggère une séquence progressive dans l'utilisation des drogues, nicotine, alcool, cannabis, puis les drogues « dures ». Elle repose sur une association statistique entre l'usage de drogues dures et le fait que ces personnes aient d'abord consommé du cannabis. Cette théorie n'a reçu aucune validation empirique et est tombée en désuétude.

Haschich

Résine issue de la plante de cannabis et transformée en pâte.

Intoxication

Perturbations qu'exerce une substance sur l'organisme. On distingue généralement quatre niveaux d'intoxication : légère, modérée, grave et mortelle.

Joint

Cigarette de marijuana, avec ou sans tabac. Le fait que deux cigarettes ne soient jamais identiques rend difficile l'analyse scientifique des effets du principe actif, notamment pour les études sur le cannabis thérapeutique.

Légalisation

Système de réglementation permettant la culture, production, fabrication, commercialisation, vente et usage de substances. Un système de légalisation peut être avec (réglementation) ou sans (libre marché) contrôles de l'État.

Liposolubilité

Propriété biophysique d'une substance de se répandre et se dissoudre plus ou moins facilement dans les graisses de l'organisme. Le THC est très liposoluble.

Marijuana

Nom mexicain qui désigne initialement une cigarette de mauvaise qualité. Par extension est devenu un équivalent pour désigner le cannabis.

Narcotique

Substance provoquant un état de torpeur ou un sommeil artificiel.

Observatoire européen des drogues et des toxicomanies (OEDT)

L'OEDT a été créé en 1993 pour apporter à la Communauté européenne et à ses États membres "des informations objectives, fiables et comparables au niveau européen sur le phénomène des drogues et des toxicomanies et leurs conséquences". Les informations statistiques, documentaires et techniques traitées ou produites par l'Observatoire fournissent à son audience une image d'ensemble sur le phénomène des drogues en Europe. L'Observatoire travaille uniquement dans le domaine de l'information. Il est composé d'un réseau de correspondants nationaux dans chacun des pays de l'Union.

Organe international de contrôle des stupéfiants (OICS)

L'Organe international de contrôle des stupéfiants (OICS ou Organe) est un organisme de contrôle indépendant et quasi-judiciaire chargé de l'application des conventions des Nations Unies sur les drogues; il a été créé en 1968 par la Convention unique sur les stupéfiants de 1961. Il a eu des prédécesseurs créés par les précédentes conventions sur les drogues, dès l'époque de la Société des Nations. L'organe est maintenant chargé de faire des recommandations à la

Commission sur les narcotiques relativement aux substances à placer dans les annexes des conventions.

Organisation mondiale de la santé (OMS)

Créée en 1948, l'OMS est l'agence des Nations Unis spécialisée dans les questions de santé. Son mandat est de favoriser le plus haut degré de santé possible. La santé est définie comme un état global de bien-être physique, psychologique et social et non seulement comme l'absence de maladie ou d'infirmité.

Office of national drug control policy (ONDCP) USA

Office national sur la politique de contrôle des drogues. Créé en 1984 sous la présidence Reagan, l'Office relève de la Maison Blanche. L'Office coordonne la politique américaine sur les drogues et gère un budget d'environ 18 milliards \$ US par année.

Opiacé

Substance contenant de l'opium ou exerçant une action comparable à celle de l'opium.

Pharmacodépendance

Voir dépendance.

Porte d'entrée (théorie de la)

Aussi nommée théorie de l'introduction. Semblable à la théorie de l'escalade mais renvoie plus spécifiquement au fait que les personnes qui se procurent du cannabis viennent en contact avec des milieux potentiellement criminogènes du fait que le cannabis soit illégal.

Programme des Nations Unies pour le contrôle international des drogues (PNUCID)

Mieux connu sous l'acronyme anglais UNDCP. Fondé en 1991, le Programme a pour objectif d'informer le monde sur les dangers de l'abus de drogues. Le programme vise à renforcer l'action internationale contre la production, le trafic et la criminalité reliée aux drogues en proposant des programmes de développement alternatif, de monitoring des cultures et de lutte au blanchiment d'argent. Le programme d'évaluation globale veut aussi fournir des données fiables et le programme d'assistance juridique aide les pays à rédiger des lois adéquates ainsi qu'à former le personnel du système de justice. Le PNUCID relève du Bureau des Nations Unies pour le contrôle des drogues et la prévention du crime.

Prohibition

Terme issu historiquement de la prohibition de l'alcool aux États-Unis entre 1919 et 1933. Par extension, ce terme renvoie aux politiques poursuivies par les États et par les Nations Unies qui visent une société sans drogue. La prohibition est un système fondé sur l'interdiction de la fabrication et de l'usage de drogues à l'exception des usages scientifiques et médicaux.

Psychotrope

Substance qui agit sur le psychisme en modifiant le fonctionnement mental, entraînant des changements dans les perceptions, l'humeur, la conscience, le comportement et diverses fonctions psychologiques et organiques. De manière spécifique réfère aux médicaments utilisés dans le traitement de désordres mentaux, tels les neuroleptiques, les anxiolytiques, etc. Renvoie aux médicaments couverts par la Convention de 1971.

Réglementation

Système de contrôle qui précise les conditions sous lesquelles il est permis de fabriquer, produire, commercialiser, prescrire, vendre ou acheter une substance. La réglementation peut être axée sur la prohibition (comme c'est le cas actuellement pour les drogues illicites) ou sur l'accès contrôlé (comme pour les médicaments psychotropes et l'alcool). Notre proposition de régime d'exemption sous conditions repose sur une approche réglementaire.

Société des Nations (SDN)

Prédécesseur de l'ONU, la SDN était l'organisation internationale des états jusqu'en 1938.

Stupéfiant

Se dit souvent des substances dont les effets psychoactifs peuvent entraîner des effets de tolérance et de dépendance. Plus correctement, ce terme ne devrait s'utiliser que pour désigner les dépresseurs du système nerveux central tels les opiacés.

Substance psychoactive

Substance qui modifie les processus mentaux tels la pensée ou les émotions. Terme plus neutre que drogue, et qui ne distingue pas les substances selon leur statut juridique (licites, illicites) c'est celui que nous préférons utiliser dans le rapport.

Tétrahydrocannabinol (Δ^9 -THC)

Principal composant actif du cannabis, le Δ^9 -THC est très liposoluble, a une demi-vie d'élimination très longue, et ses effets psychoactifs sont modulés par les autres cannabinoïdes du cannabis. À l'état naturel, le cannabis contient entre 0,5 % et 5 % de concentration en THC. Les modes de culture sophistiqués, la sélection des plants, le choix entre des plants femelles, permettent d'atteindre des concentrations plus élevées, pouvant dans certains cas aller jusqu'à 30 %.

Tolérance

État induit par la consommation chronique d'une substance menant à une diminution de la réponse de l'organisme et une capacité plus grande de supporter ses effets.

Toxicité

Qualité spécifique à une substance d'entraîner l'intoxication. Le cannabis a une toxicité très faible et ne présente à peu près aucun risque de surdose.

Toxicomanie

Terme le plus fréquemment utilisé en langue française pour désigner les phénomènes que l'anglais désigne sous le terme *addiction*. Usage répété d'une ou plusieurs substances de telle sorte que l'usager (alors désigné sous le terme «toxicomane») est en état régulier ou chronique d'intoxication, ressent le besoin de consommer, a de la difficulté à cesser la prise, et cherche à se procurer la substance. Cet état est généralement caractérisé par la tolérance et la dépendance à la substance ainsi que par un usage compulsif. Malgré son usage répandu, l'OMS a recommandé dès 1960 d'en abandonner l'usage pour cause d'imprécision, et de lui préférer le terme de dépendance.

INTRODUCTION

La question des drogues illicites fait partie de ces enjeux de société qui prennent aisément une tournure morale, sinon simplement émotive. Qui d'entre nous n'a pas ses opinions sur les drogues et les « drogués » ? Qui ne connaît pas, de loin ou de proche, un parent, une amie, un jeune cousin, un oncle, qui a connu des difficultés personnelles, à l'école, au travail, peut-être même des démêlés avec la police et la justice, en raison de sa consommation de drogues ? Qui n'a pas entendu parler de ces trafiquants de drogues, véritables anti-héros qui à la fois nous révulsent et nous fascinent, et qu'au total on assimilera aisément à une racaille de la pire espèce qui s'enrichit en vendant des produits plus ou moins frelatés, plus ou moins dangereux, à *nos* enfants ? Chaque jour connaît sa ration d'articles de journaux et de reportages télévisés, sur les opérations antidrogues menées par les forces policières : arrestations parfois massives, presque toujours spectaculaires, saisies de quantités de kilos de drogues, d'argent, d'armes de toutes sortes. Chaque jour connaît aussi sa ration d'articles sur le blanchiment d'argent et la corruption que le marché illicite des drogues entraîne dans son sillage. Plus près de nous encore, les événements du 11 septembre ont ramené à l'avant-scène les relations ambiguës et présumées entre le trafic de drogues et le financement de réseaux de « terroristes », tout comme ils ont mené à un discours politique et juridique où la sécurité est le maître mot.

La question des drogues touche à des valeurs politiques du vivre en commun. Dans quel genre de société voulons-nous vivre ? Quelle est la place que doivent, que peuvent, y occuper les drogues ? Pour certains, les drogues sont des substances qui maintiennent les individus dans un état de dépendance. Leur utilisation affaiblit les capacités morales, quand elle ne traduit pas tout simplement la préexistence de faiblesses de caractère ; sinon source de déchéance, les drogues empêchent les usagers d'atteindre leur plein épanouissement et la pleine réalisation de leur potentiel et diminue en tout cas leur capacité d'être des individus productifs dans la société. Pour d'autres, les drogues sont au contraire des outils pour atteindre à une productivité plus grande, pour être plus compétitifs et partant mieux insérés dans un monde lui-même hyper-compétitif. L'exemple évident est celui des athlètes de haut niveau. Pour d'autres encore elles sont un moyen privilégié d'entrer en contact avec d'autres dimensions de leur être, dimensions spirituelles, artistiques, ou tout simplement de paix et de sérénité. L'histoire de l'art est pleine d'exemples. Entre ces conceptions presque diamétralement opposées, il y a souvent peu de place au dialogue et beaucoup de préjugés entre les uns et les autres.

Depuis une vingtaine d'années, nous avons adopté des programmes vigoureux de lutte antitabac. Et nous avons certainement enregistré un certain nombre de succès. Nous avons aussi adopté des mesures plus sévères pour réprimer la conduite avec facultés affaiblies. Ici aussi, nous pensons avoir enregistré des progrès significatifs. La lutte aux drogues devient une sorte de métaphore du type de politiques sociales que nous attendons des gouvernements : politiques axées sur le mieux-être des citoyens.

Évidemment, tout dépend de ce que chacun met dans le mot drogues. Lorsque nous pensons à «drogue», nous avons d'abord en tête les substances illicites : cocaïne et héroïne bien entendu, crack, ecstasy et amphétamines pour les plus «branchés», et bien sûr le cannabis et le haschich que nous avons tendance à identifier comme drogues «douces». Or, de plus en plus de travaux scientifiques et des politiques gouvernementales s'efforcent de réduire la distance entre les diverses drogues, montrant plutôt les liens qu'elles entretiennent, discutant des conduites à risque relatives à chaque produit. Pour certains, en France par exemple, le simple fait de considérer l'alcool comme une drogue signifie une véritable révolution culturelle. Et pour les fabricants de tabac, la nicotine n'est certainement pas à ranger dans la même classe que l'héroïne.

C'est comme tout un chacun que les membres du **Comité spécial du Sénat sur les drogues illicites** ont abordé la question des drogues. C'est-à-dire avec les mêmes préconceptions, avec les mêmes attitudes de base, les mêmes craintes, les mêmes angoisses. Certes, nous disposions de l'étude que plusieurs de nos collègues avaient faite en 1996 du projet de loi du gouvernement sur les drogues illicites qui leur avait permis d'entendre plusieurs témoins durant quelques mois. Et nous savions aussi, en commençant ce travail, que nous disposerions de l'expertise de chercheurs. Mais qu'on ne se fasse pas d'illusion : il demeure difficile de dépasser les attitudes et opinions longtemps tenues pour acquises. Qu'on soit tenant d'un contrôle pénal renforcé ou tout au contraire d'une libéralisation plus grande, les opinions ont tendance à résister aux faits. D'autant plus que, dans un domaine comme celui-ci, la production des faits, même par la recherche scientifique, n'est pas nécessairement neutre. Il s'ensuit donc que **nous aussi, comme vous**, nous avons nos préjugés et nos préconceptions. Et que nous devons, ensemble, faire l'effort de les dépasser. C'est l'un des objectifs que poursuit ce rapport.

Notre rapport se divise en quatre parties. La première fait état de nos orientations générales et comprend quatre chapitres. Le premier rappelle l'origine du Comité et son mandat. Le second chapitre décrit les travaux que nous avons entrepris, explicitant certains choix que nous avons faits. Le troisième, central à toute l'architecture du rapport, en fournit en quelque sorte une grille de lecture. Ce chapitre propose en effet ce que nous avons appelé des **principes directeurs** pour une politique publique sur les drogues illicites. Enfin, le quatrième chapitre offre un large panorama de la situation contemporaine relative aux drogues illicites, situant nos travaux dans un contexte de changements et de mutations qui se produisent dans divers pays et plus généralement sur la scène internationale.

La seconde partie est au cœur même de notre rapport. Elle présente en effet l'ensemble des résultats issus de la recherche scientifique ainsi que des opinions des experts que nous avons entendus. Le chapitre 5 décrit la plante d'où sont issus le cannabis et le haschich que l'on fume, présente quelques données sur les sources de production du cannabis et ses principales voies de circulation, et examine les propriétés pharmacologiques des cannabinoïdes qui sont leur ingrédient actif. Le chapitre 6 présente les données relatives aux usages et aux usagers : qui consomme du cannabis, dans quelles circonstances, que connaît-on de leurs trajectoires de consommateurs, notamment la question hautement controversée de savoir si la consommation de cannabis mène à l'usage d'autres drogues. Le chapitre 7 décrit les effets et conséquences du cannabis aux plans physique et psychologique, s'arrêtant notamment aux questions importantes de la dépendance et de la tolérance au cannabis. En raison de son importance dans les débats de société sur les substances psychoactives capables d'avoir un effet sur les facultés cognitives et psychomotrices, le chapitre 8 porte spécifiquement sur la conduite de véhicules automobiles sous l'influence du cannabis. Par ailleurs, tenant compte de la place particulière qu'occupe présentement la question des usages thérapeutiques du cannabis, le chapitre 9 y est consacré. Finalement, le dernier chapitre de cette section discute de la connaissance de l'opinion publique. Nous y décrivons les sondages et enquêtes en population générale, mais nous y rapporterons aussi les propos qui nous ont été tenus lors des consultations que nous avons menées dans les régions suite à la publication en mai 2002 de notre document de discussion.

La troisième partie s'arrête aux politiques et pratiques au Canada. Quand on pense aux drogues, on pense immédiatement à la législation qui les régit. On oublie ainsi qu'une politique publique est faite de bien autre chose que de la loi, que celle-ci n'en est jamais qu'un élément parmi d'autres. C'est l'objet du chapitre 11 qui s'intéresse à la Stratégie nationale antidrogues qui a eu cours au Canada entre 1987 et 1997. Il convient d'autant plus de s'y arrêter que cette stratégie a été le seul moment dans l'histoire de nos politiques publiques sur les drogues où il a été tenté d'adopter une stratégie globale et intégrée. Le chapitre 12 présente ensuite l'historique de la législation canadienne en matière de drogues illicites jusqu'à celle qui prévaut depuis 1996. Cet historique est important puisqu'il permet de mieux saisir les éléments de continuité et de rupture qui ont pu marquer les discours et les pratiques. Nous consacrons un chapitre spécifique (13) à l'examen de la réglementation de l'accès au cannabis thérapeutique. Les quatre chapitres qui suivent examinent les pratiques des diverses institutions qui mettent en œuvre les politiques publiques en matière de drogues illicites : d'abord les pratiques policières (14) et les pratiques judiciaires (15) qui sont au cœur de l'approche en matière de drogues, puis aux chapitres 16 et 17 les pratiques de prévention et les pratiques de soin. Nous concluons cette troisième partie sur une série de trois observations transversales sur les pratiques, insistant en particulier sur la question de leurs coûts économiques.

La partie IV traite des approches de politiques publiques. En matière de drogues, on ne peut faire l'économie de l'architecture des conventions internationales qui régissent ces substances depuis 1912 ; c'est l'objet du chapitre 19. Mais les pays ont choisi des voies différentes pour répondre aux attentes de la communauté internationale. Le chapitre 20 s'arrête longuement aux politiques publiques mises en œuvre dans sept pays. Enfin, le chapitre 21 est fondamental pour comprendre à la fois les recommandations que nous faisons en même temps que pour faire le pont avec nos principes directeurs. Il y est question des approches de politiques publiques. On y verra en premier lieu que la législation n'épuise pas, tant s'en faut, le champ des politiques publiques de l'État en matière sociale généralement, en matière de drogues illicites en particulier. On y distinguera aussi entre les diverses approches législatives, clarifiant au passage des termes très chargés tels ceux de décriminalisation ou de légalisation. Nous explicifions ensuite les motifs, provenant de la connaissance autant que des principes directeurs et de la lecture que nous faisons des attitudes des Canadiens, qui sous-tendent les choix que nous faisons.

Synthétisant l'ensemble de ces connaissances nous émettons un certain nombre de conclusions et de recommandations qui traduisent la thèse fondamentale qui sous-tend notre rapport. Cette thèse est la suivante : *dans une société libre et démocratique qui reconnaît fondamentalement mais non exclusivement la primauté du droit comme source de règles normatives, et où la puissance publique doit le plus possible favoriser l'autonomie et conséquemment utiliser avec parcimonie les outils de contrainte, une politique publique sur les substances psychoactives doit s'articuler sur des principes directeurs respectant la vie, la santé, la sécurité et les droits et libertés de chaque individu qui, naturellement et légitimement, recherche son bien-être et son épanouissement, et a la capacité de reconnaître la présence, la différence et l'équivalence de l'autre.*

Nous sommes conscients, tout autant qu'au début de nos travaux, qu'il n'existe pas de consensus préétabli dans la société canadienne sur les choix de politiques publiques en matière de cannabis. En fait, nous avons constaté qu'il y a peu de sociétés où existe un consensus largement partagé dans la population et entre la population et les décideurs. Nous sommes conscients, plus encore peut-être qu'au début de nos travaux, que la question du cannabis, vue sous l'angle des politiques publiques qui la gouverne, s'inscrit dans un contexte international plus large et que nous ne saurions penser ni agir comme si nous étions isolés. Nous sommes conscients, enfin, que nos propositions bousculeront plusieurs préjugés et rencontreront des résistances. Nous pensons cependant que la société canadienne aura la maturité de les recevoir et de les étudier à leur mérite.

En ce domaine, comme en tant d'autres domaines de politiques publiques, nous disons qu'il faut agir, et que les connaissances accumulées supportent amplement les orientations que nous proposons, mais que le partage des connaissances et le débat public demeurent des conditions essentielles à la vie démocratique.

PARTIE I

ORIENTATIONS GÉNÉRALES

CHAPITRE 1

NOTRE MANDAT

LIBELLÉ

Le 16 avril 2000, suite à une motion déposée par le sénateur Pierre Claude NOLIN, le Sénat adoptait l'ordre de renvoi suivant :

« Qu'un comité spécial du Sénat soit formé afin de réévaluer les lois et les politiques canadiennes antidrogues, de consulter abondamment la population canadienne pour déterminer les besoins spécifiques des différentes régions du pays, plus particulièrement là où les problèmes sociaux liés au trafic et à l'usage de drogues illicites sont plus manifestes, d'élaborer des propositions pour diffuser toute information relative à la politique canadienne antidrogues et, enfin, de produire des recommandations pour en arriver à l'adoption d'une stratégie antidrogues mise au point par et pour les Canadiens encourageant tous les paliers de gouvernement à travailler en étroite collaboration à la réduction des méfaits liés à la consommation de drogues illicites ;

Sans que ce qui suit ait pour effet de restreindre son mandat, que le comité soit autorisé à :

- Réexaminer l'approche adoptée par le gouvernement fédéral pour combattre la consommation de drogues illicites au Canada, son efficacité comme moyen de réduire les effets de la consommation de stupéfiants et la mesure dans laquelle son application est juste ;
- Élaborer une politique nationale de réduction des méfaits afin d'atténuer les impacts négatifs de la consommation de drogues illicites au Canada et faire des recommandations sur la façon d'appliquer cette politique, notamment la possibilité de considérer avant tout l'usage et l'abus de drogues comme un problème socio-sanitaire ¹;
- Étudier les modèles de réduction des méfaits adoptés par d'autres pays et déterminer, s'il y aurait lieu, de les appliquer partiellement ou intégralement, au Canada ;
- Examiner le rôle et les obligations internationales qui incombent au Canada en vertu des conventions des Nations Unies sur les stupéfiants, de la Déclaration universelle des droits de l'homme et d'autres traités connexes afin de déterminer si ces traités l'autorisent à prendre des mesures autres que les poursuites criminelles et la pénalisation des contrevenants à l'échelle internationale ;

¹ En caractère gras dans l'original.

- *Explorer les effets du cannabis sur la santé et étudier la question de savoir si l'emploi de politiques alternatives au sujet de l'usage du cannabis conduirait à une augmentation de l'usage et de l'abus à court et à long terme ;*
- *Étudier la possibilité que le gouvernement use du pouvoir de réglementation que lui confère la Loi sur les contraventions comme moyen supplémentaire d'appliquer une politique de réduction des méfaits comme il est d'usage dans d'autres juridictions ;*
- *Étudier toute autre question relative à la politique canadienne antidrogues que le comité juge appropriés pour accomplir son mandat. »*

Suite à l'adoption de cette motion, le président du Comité a invité le Sénat à désigner les membres qui formeraient le Comité. Furent alors nommés les Sénateurs suivants : Pierre Claude NOLIN, président, Sharon CARSTAIRS, Vice-présidente, Colin KENNY, Lucie PÉPIN et Eileen ROSSITER.

Le Comité ainsi constitué a approuvé un programme de travail et un budget qu'il a ensuite soumis à ses pairs à la Chambre haute. Le budget du Comité a été approuvé en juin 2000 permettant ainsi l'embauche des personnels scientifique et administratif qui le soutiendraient dans ses travaux. Le Comité a organisé son programme d'audiences de témoins experts et tenu ses premières audiences le 16 octobre 2000.

Toutefois, suite au déclenchement des élections générales en octobre 2000, le Comité a été dissous. Il a été reconstitué le 15 mars 2001 mais avec un mandat modifié : en effet, la portée de ses travaux était désormais réduite au cannabis. Le mandat du Comité dans sa forme actuelle se lit donc comme suit :

« Qu'un comité spécial du Sénat soit formé afin de faire rapport sur :

- *l'approche du Canada concernant le chanvre indien (cannabis), ses préparations et dérivés et les préparations synthétiques semblables, en contexte ;*
- *l'efficacité de cette approche, les moyens de sa mise en œuvre ainsi que le contrôle de son application ;*
- *les politiques officielles pertinentes adoptées par d'autres pays ;*
- *le rôle et les obligations internationales qui incombent au Canada en vertu des conventions des Nations Unies sur les stupéfiants relativement au cannabis, de la Déclaration universelle des droits de l'homme et d'autres traités connexes ;*
- *les effets sociaux et sanitaires du cannabis et les effets possibles de politiques différentes ;*

Que le comité spécial soit composé de cinq sénateurs dont trois constituent le quorum ;

Que les honorables sénateurs Banks, Kenny, Nolin et Rossiter (le cinquième membre sera nommé par le whip en chef du gouvernement) soient nommés au comité ;

Que le comité ait le pouvoir de faire comparaître des personnes et produire des documents, d'entendre des témoins, de faire rapport au besoin et de faire imprimer au jour le jour documents, mémoires et témoignages selon les instructions du comité ;

Que les mémoires reçus et les témoignages entendus lors de l'examen du projet de loi C-8, Loi portant sur la réglementation de certaines drogues et de leurs précurseurs ainsi que d'autres

substances, modifiant certaines lois et abrogeant la Loi sur les stupéfiants en conséquence par le Comité sénatorial permanent des affaires juridiques et constitutionnelles durant la deuxième session de la trente-cinquième législature, soient envoyés au comité ;

Que les documents et les témoignages recueillis sur le sujet par le Comité spécial sur les drogues illicites du Sénat durant la deuxième session de la trente-sixième législature soient envoyés au comité ;

Que le comité soit habilité à autoriser, s'il le juge opportun, la radiodiffusion, la télédiffusion et la diffusion par les médias électroniques de la totalité ou d'une partie de ses délibérations et des informations qu'il détient ;

Que le comité présente son rapport final au plus tard le 31 août 2002 et qu'il conserve les pouvoirs nécessaires à la diffusion de ses constatations pendant trente jours après le dépôt de son rapport ;

Que le comité soit autorisé, indépendamment de l'usage habituel, à déposer son rapport auprès du greffier du Sénat si le Sénat ne siège pas, et que le rapport soit réputé avoir été déposé au Sénat. »

ORIGINES

Le mandat dévolu au Comité s'inscrit dans l'historique de la législation adoptée en 1996 par le Parlement du Canada en matière de drogues, la *Loi réglementant certaines drogues et autres substances*. Cette législation, refondant les lois sur les drogues au Canada et abrogeant la *Loi sur les stupéfiants* et certains articles de la *Loi sur les aliments et drogues*, s'inscrit elle-même dans une histoire relativement longue dont nous donnerons ici un bref aperçu puisque le chapitre 12 est consacré à l'historique détaillé des lois sur les drogues au Canada.

Le projet de loi C-7 déposé en première lecture par le gouvernement libéral nouvellement élu en février 1994 proposait de refondre la législation en matière de drogues illicites, afin notamment de lui donner une plus grande cohérence et de rendre la législation nationale conforme aux obligations du Canada relativement à la *Convention des Nations Unies contre le trafic illégal des stupéfiants et d'autres substances psychotropes* signée en 1988. Ce projet a franchi toutes les étapes jusqu'à la troisième lecture en octobre 1995. Suite à la prorogation de la 1^{re} session de la 35^e législature, il a été réintroduit à la Chambre des Communes au début de la 2^e session, le 6 mars 1996, sous le nom de C-8. Il a été adopté la même journée et renvoyé au Comité sénatorial permanent des affaires juridiques et constitutionnelles qui en a fait une lecture détaillée et entendu plusieurs témoins. Le projet de loi C-8 a été adopté et a reçu la sanction royale le 20 juin 1996. Il s'agit donc de la législation en vigueur actuellement au pays en matière de drogues illicites.

Lors des travaux, en 1994 et 1995, du Sous-comité sur le projet de loi C-7 du Comité permanent de la Santé de la Chambre des Communes, « l'immense majorité des témoins (...) se sont montrés très critiques envers le projet de loi. Les critiques les plus générales

portaient sur trois points : d'abord le manque de principes de base ou d'un énoncé explicite sur le but de la loi ; ensuite, le fait que le projet de loi suivait le système de prohibition des années 20, codifié par la suite dans la Loi sur les stupéfiants ; enfin, l'absence d'une insistance sur les critères de réduction des dommages et de prévention qui sont à la base de la Stratégie canadienne antidrogues. »² Malgré les amendements apportés par le sous-comité de la Chambre, les témoignages des personnes entendues par le Comité du Sénat ont été tout aussi critiques. Les témoins ont fait observer que la loi ne catégorise pas les drogues selon leurs dangers, qu'elle ne comporte pas de critères précis et rationnels, ou qu'il était impossible, notamment au vu de la complexité de la loi, de savoir comment elle serait appliquée dans la pratique.

L'ensemble de ces critiques avait mené le Comité sénatorial à « proposer énergiquement » la création d'un Comité mixte de la Chambre des Communes et du Sénat qui examinerait toutes les lois, politiques et programmes canadiens antidrogues.³

Les élections fédérales de 1997 ont toutefois coupé court à cette demande. Le sénateur NOLIN, convaincu de la nécessité d'agir, et devant l'inaction de la Chambre des Communes, a donc déposé sa première motion en 1999 pour que soit créé un Comité du Sénat ayant pour mandat d'examiner les lois, politiques et programmes sur les drogues illicites au Canada. Cette motion a suivi son cours jusqu'à son adoption par le Sénat en avril 2000.

Pour appuyer cette motion, le Sénateur NOLIN avait alors fait préparer par la Dr Diane Riley une étude sur la politique canadienne de contrôle des drogues. Cette étude visait notamment à « aider à analyser la politique de contrôle de l'utilisation des stupéfiants sous un jour nouveau, sans se laisser influencer par les préjugés souvent non fondés que la société canadienne entretient vis-à-vis des toxicomanes. »⁴ Le sénateur NOLIN y écrivait encore qu'un Comité spécial du Sénat

*« serait chargé, dans un premier temps, de transmettre à la population canadienne une information précise et objective sur l'utilisation des drogues illégales, leurs effets sur les individus et la société et les mesures de contrôle en place. Dans un deuxième temps, il pourrait mener des consultations sur les modifications souhaitables que le Parlement devrait apporter à la législation sur le contrôle de l'utilisation des drogues dans les années qui viennent. »*⁵

² Allain, J. (1997) *Projet de loi C-8 : Loi réglementant certaines drogues et autres substances*. Ottawa : Bibliothèque du Parlement, page 35.

³ Comité sénatorial permanent des affaires juridiques et constitutionnelles, Onzième rapport, juin 1996, page 8.

⁴ Nolin, P.C. (1998) Préface. In Riley, D., (1998) *La politique canadienne de contrôle des drogues. Aperçu et commentaires*. Ottawa, page 10.

⁵ *Ibid.*, page 11.

NOTRE COMPRÉHENSION

Notre mandat comporte quatre composantes essentielles et incontournables :

1. Examiner l'approche en matière de cannabis, les moyens de sa mise en œuvre, les modalités de contrôle et son efficacité ;
2. Examiner les politiques et approches suivies dans d'autres pays ;
3. Examiner les implications des conventions et traités internationaux ; et
4. Examiner les effets sociaux et sanitaires du cannabis et les effets possibles de politiques différentes.

Nous avons choisi d'interpréter notre mandat de la manière la plus large possible. Certains nous ont demandé si nous avions l'ambition d'être une Commission Le Dain⁶ bis. D'autres nous ont dit que nous n'avions pas les moyens de notre volonté d'être aussi exhaustifs et rigoureux. D'autres encore ont regretté le « saucissonnage » qui nous a limités, dans cette première phase de nos travaux, au cannabis, comme si l'on pouvait séparer ainsi les diverses substances et classer les usagers en conséquence.

Le chapitre suivant, sur notre programme de travail, démontrera clairement que nous avons été animés par une ambition de rigueur et le désir d'embrasser large. Néanmoins, nous sommes conscients de la portée et des limites de notre rôle de Comité sénatorial. D'autant plus conscients d'ailleurs que les moyens mis à notre disposition étaient aussi restreints que notre ambition était généreuse.

La question du découpage entre les substances est plus problématique, pour diverses raisons. Premièrement, des travaux récents démontrent qu'il est plus important de distinguer entre les conduites des usagers qu'entre les substances. Selon cette perspective, ce ne sont donc pas tant les drogues elles-mêmes qu'il convient de distinguer que les manières différentielles de les consommer et les milieux dans lesquels s'inscrivent ces usages, et par là les risques que courent un certain nombre d'usagers. On parlera ici de conduites à risque⁷ qui ne tiennent pas tant des caractéristiques des substances que de celles des usagers et des conditions dans lesquelles se font les usages. Deuxièmement, les distinctions entre substances ne reposent pas sur des bases scientifiques claires. Ainsi, selon qu'on considère les propriétés pharmacologiques des diverses drogues, leurs effets sur la santé physique ou leur origine et leurs modes de culture, on arrive à des classifications entièrement différentes. Et troisièmement, ce découpage entre substances ne permet pas de proposer une politique globale et intégrée sur les drogues.

⁶ La Commission Le Dain a enquêté sur les drogues illicites au début des années 1970. Il en sera plus amplement question au chapitre 12. Voir : Canada (1970) *Rapport provisoire de la Commission d'enquête sur l'usage des drogues à des fins non médicales*. (Commission Le Dain) Ottawa : Imprimeur de la Reine.

⁷ Sur cette question voir notamment les travaux des professeurs Parquet et Reynaud, notamment Reynaud, M., P.J. Parquet et G. Lagrue (1999) *Les pratiques addictives. Usage, usage nocif et dépendance aux substances psychoactives*. Rapport préparé à la demande du Directeur général de la Santé. Paris : Secrétariat d'État à la Santé et aux Affaires Sociales.

Par ailleurs, ce découpage qui nous a fait limiter nos travaux au cannabis n'a pas que des inconvénients et des limites. Avouons d'abord qu'embrasser l'ensemble du champ des drogues illicites d'un seul coup avec si peu de moyens relevait du tour de force. De plus, des commissions d'enquête récentes et des conférences scientifiques internationales ont choisi de faire le point, comme nous, sur l'état des connaissances en matière de cannabis. Nous pouvions donc à la fois nous servir de leurs travaux et les comparer aux nôtres. Enfin, et surtout, des expériences menées dans d'autres pays, notamment aux Pays-Bas, montrent tout le mérite qu'il peut y avoir à traiter le cannabis séparément, dans une approche de « séparation des marchés ».

En somme, tout en restreignant nos travaux au domaine du cannabis, nous avons toujours invité les témoins entendus à ne pas se limiter à cette seule substance et à nous montrer les liens entre elles et entre les divers comportements à risque des usagers lorsqu'ils se présentent. Nous avons aussi gardé en mémoire la nécessité d'aborder les drogues dans une politique intégrée, notamment lorsqu'il est question des grands paramètres d'une politique publique, législation ou infrastructure de connaissance par exemple.

CHAPITRE 2

NOS TRAVAUX

Concevoir, élaborer, implanter une politique publique, est au cœur même de la chose publique, de la vie politique au sens fort. Ce geste fondamental suppose de choisir entre diverses alternatives et, en démocratie, d'expliquer et de justifier le choix qui est fait. Or, une politique publique, quel que soit son objet, est au confluent d'influences diverses : des considérations de politique partisane bien sûr, des considérations économiques aussi et même de plus en plus. Mais si tant est qu'elle prétende à une certaine rationalité et à l'adhésion des citoyens, une politique publique doit aussi s'appuyer sur des données objectives et rigoureuses, préférablement des données émanant de la recherche scientifique, ainsi que sur une compréhension des attentes et des résistances de la société. Enfin, une politique publique devrait, selon nous prendre appui sur, et en même temps promouvoir, des principes directeurs. Nous entendons par là une vision claire et explicite des principes qui président au choix entre diverses alternatives et qui traduisent une conception du gouvernement et de la relation entre les institutions de l'État et la société civile.

Notre Comité a choisi, dès le départ, de rester au-dessus des questions partisans. C'est là tout l'avantage d'appartenir au Sénat, qui permet de porter, sur diverses questions, un regard plus distancié, qui n'est pas à la solde des intérêts reliés à la réélection. Quant aux considérations d'ordre économique, elles nous ont affectés de deux manières différentes. La première, banale, relève des budgets qui nous étaient alloués et qui limitaient nécessairement la portée de nos travaux. La seconde manière tient aux impacts économiques de diverses options de politique publique, dont il sera question aux chapitres 18 et 21.

Nos travaux se sont donc centrés sur les trois autres sources qui devraient influencer un choix de politique publique en matière de drogues illégales, soit la connaissance, l'opinion publique et les principes directeurs.

Lors des audiences publiques du Comité, le président présentait ainsi le programme de travail :

« Afin de remplir adéquatement le mandat qui lui est confié, le comité a adopté un plan d'action. Ce plan s'articule autour de trois enjeux dont le premier est celui de la connaissance. Nous entendons une gamme importante d'experts, tant Canadiens qu'étrangers, des milieux académiques, policiers, judiciaires, médicaux, gouvernementaux et sociaux. (...) »

Le deuxième enjeu, sûrement le plus noble, est le partage de la connaissance. Le comité désire que les Canadiens de partout s'informent et partagent l'information que nous aurons recueillie. Afin de réaliser cet enjeu, nous assurerons l'accessibilité et la distribution de cette connaissance. Nous voudrions également connaître les vues de la population sur celle-ci et pour ce faire nous tiendrons au printemps 2002 des audiences publiques à différents endroits au Canada.

Enfin, comme troisième enjeu, le comité voudra examiner quels sont les principes directeurs sur lesquels une politique publique canadienne sur les drogues doit s'appuyer. »¹

Ce chapitre décrit les diverses actions que nous avons entreprises pour cerner l'état des connaissances et de l'opinion publique sur le cannabis et déterminer des principes directeurs. Le chapitre suivant présentera en détail nos principes directeurs, tandis que les parties II et III présentent l'ensemble des connaissances que nous avons pu recueillir. Mais d'abord quelques mots sur deux principes de travail qui nous sont apparus essentiels à la pleine réalisation du mandat de ce Comité.

DEUX PRINCIPES DE TRAVAIL

Tenant compte de l'énoncé de notre mandat qui incluait l'obligation de fournir aux Canadiens une information juste et rigoureuse, nous avons insisté, tout au long de nos travaux, sur la rigueur et la transparence.

Mener nos travaux de manière rigoureuse était d'autant plus impératif qu'en matière de drogues illicites, les opinions des uns et des autres sont fortes, souvent tranchées. Comme chacun d'entre vous, nous avions, nous aussi, nos opinions et nos conceptions sur les drogues illicites au début de nos travaux. Comment pourrait-il en être autrement ? Comme vous, nous avons des enfants. Comme vous, nous avons connu des amis, des parents, dont la vie a été chavirée par des problèmes de toxicomanie. L'étude que nous avons faite du projet de loi du gouvernement et qui nous avait donné la chance d'entendre un certain nombre d'intervenants et d'experts nous avait alimentés d'informations certes, mais avait aussi laissé voir les carences importantes de notre savoir. Il nous était apparu alors plus clairement que les opinions étaient souvent basées sur des informations partielles, parfois fausses. Sur quelle base affirmer que le cannabis mène à l'usage d'autres drogues ? Quelles sont les assises des conceptions de la dépendance ? Quelle est réellement la marge de manœuvre d'une nation face aux dispositions des conventions internationales régissant la production, le trafic, et la possession de drogues illicites ?

On ne peut affirmer une chose et son contraire. Or, en matière de drogues, et spécifiquement en matière de cannabis, c'est bien là ce qu'il nous était donné d'entendre, et avec conviction. Comment déterminer qui avait raison ? Et démêler les opinions des faits ?

¹ Sénat du Canada (2001) *Délibérations du Comité spécial sur les drogues illicites*. Fascicule no 1, page 23.

Ces constats nous ont convaincus que la plus grande rigueur s'imposait au cours de nos travaux. Mais il ne suffisait pas d'être rigoureux. Pour que cette information atteigne les Canadiens, il fallait qu'elle ne soit pas réservée à notre usage exclusif. D'où le second principe qui nous a guidés : la transparence. Dès le départ en effet, nous avons insisté pour que tous nos travaux soient le plus rapidement possible rendus disponibles sur notre site internet. Pour les audiences de témoins experts, rien là de neuf puisqu'il est de pratique courante pour la plupart des Comités parlementaires d'agir ainsi. Mais en plus de ces témoignages, nous avons commandé un certain nombre d'études, notamment auprès de Division de la recherche parlementaire de la bibliothèque du Parlement. Nous avons insisté et obtenu que ces études, souvent rendues publiques seulement après la publication du rapport du comité, soient mises à la disposition des Canadiens au fur et à mesure.

Législateurs, nous souhaitons bien entendu que nos travaux aient un impact sur les politiques publiques. Nous pensons qu'il est au moins aussi essentiel de fournir aux citoyens du pays une information que nous pensons la plus rigoureuse possible, afin qu'ils puissent en bénéficier.

L'ÉTAT DES CONNAISSANCES

Lorsque la Commission royale d'enquête sur l'usage des drogues à des fins non médicales a mené ses travaux au début des années 1970, elle disposait, comme la majorité des commissions d'enquête, d'un personnel et de budgets importants lui permettant de mener un vaste programme de recherche. C'était d'autant plus nécessaire qu'il n'existait pas encore, à cette époque, un large bassin de connaissances sur les drogues illicites. On ne savait à peu près rien des principes actifs du cannabis et même des propriétés pharmacologiques des drogues plus traditionnelles comme l'héroïne et la cocaïne, on connaissait peu de choses sur les trajectoires des usagers, les études criminologiques sur la relation entre drogues et criminalité étaient pour ainsi dire inexistantes et les études d'impact des politiques publiques en étaient à leurs tout débuts.

Dire que la situation a changé du tout au tout serait un euphémisme. Dans l'ensemble des disciplines scientifiques, depuis la biologie moléculaire jusqu'à l'anthropologie, on ne compte plus le nombre d'études qui ont été menées au cours des vingt-cinq dernières années sur les drogues illicites en général, sur le cannabis en particulier. Elles proviennent des États-Unis, mais aussi d'Allemagne, d'Australie, du Canada, du Danemark, de Finlande, de France, d'Italie, du Royaume-Uni, de Suède et de Suisse... Elles ont été menées par des universitaires s'intéressant à ces questions sur un plan purement individuel, par des laboratoires pharmacologiques, par des regroupements de chercheurs au sein d'organismes oeuvrant dans le domaine des

toxicomanies, et dans le cadre de commissions scientifiques nommées par des gouvernements de divers pays.

Le Comité a d'ailleurs commandé à la Bibliothèque de Parlement un inventaire des recherches en cours ou complétées depuis les cinq dernières années au fédéral et dans les provinces et territoires sur les drogues illicites.² Cet inventaire, qui n'a aucune prétention à être exhaustif offre plutôt un panorama de l'étendue et de la portée des recherches, démontre à l'évidence que, malgré des budgets lilliputiens comparativement à ce qu'y consacrent les USA, la recherche sur les drogues se porte relativement bien au pays. Quant à faire l'inventaire des études en cours aux USA sur la question des drogues illicites, nous pouvons seulement imaginer que ce serait là une tâche colossale.

Cerner l'état des connaissances signifiait donc en tout premier lieu de se donner les moyens d'en faire une synthèse rigoureuse. Pour ce faire, le Comité s'est donné un programme de recherche portant sur l'ensemble des aspects. Mais n'ayant pas les moyens financiers de produire une vaste série d'études, et souhaitant aussi assurer une transmission large de l'information au public, le Comité a conçu un programme d'audiences publiques de témoins experts susceptibles de contribuer en même temps à mieux cerner l'état des connaissances.

Le Comité a approuvé un programme de travail portant sur cinq grands axes de connaissance se déclinant chacun en questions spécifiques :

- *Aspects socio-historiques, géopolitiques, anthropologiques, criminologiques et économiques de la consommation et de la réglementation du cannabis.* Cette première série de questions permet de situer le contexte et de saisir les pratiques contemporaines en matière de production et d'usage. Les principales questions sont :
 - Quel est l'historique du cannabis, sa production, sa consommation, les modalités de son usage ?
 - Y a-t-il une relation entre l'usage du cannabis et des pratiques religieuses ou culturelles ?
 - Quelle est la relation entre la production, la consommation et l'usage des drogues et les caractéristiques socio-démographiques des populations ? Plus spécifiquement, que sait-on des usagers de cannabis ?
 - Quelles sont les routes des drogues et comment sont-elles reliées aux situations politiques nationales et internationales ?
 - Quelles sont les relations entre les diverses drogues et comment en est-on arrivé à distinguer entre drogues licites et illicites ?

² Leduc, D., Miller-Chenier, N. et S. Norris (2001) *Inventaire de la recherche fédérale sur les drogues illicites et les questions connexes*. Ottawa : Bibliothèque du parlement, et Miller Chenier, N. et S. Norris (2002) *Inventaire de la recherche provinciale et territoriale sur les drogues illicites et les questions connexes*. Ottawa : Bibliothèque du Parlement. Rapports préparés pour le Comité spécial du Sénat sur les drogues illicites, disponibles en ligne à l'adresse : www.parl.gc.ca/drogues-illicites.asp

- Quelle est la relation entre production, consommation et réglementation des drogues et criminalité ?
- Quels sont les aspects économiques de l'usage, la production, la consommation et la réglementation du cannabis ?
- *Aspects médicaux et pharmacologiques de la consommation et de la réglementation du cannabis.* L'utilisation du cannabis à des fins médicales occupe actuellement une place importante dans le débat sur les régimes réglementaires le régissant. Il s'agit ici de faire le point sur l'état de la recherche médicale et sur les connaissances quant aux effets physiologiques et psychologiques des diverses drogues. Les principales questions sont :
 - Quelles sont les diverses formes d'utilisation du cannabis à des fins médicales ?
 - Quel est l'état des connaissances quant aux propriétés thérapeutiques du cannabis ?
 - Que connaît-on quant aux effets physiologiques du cannabis, notamment la tolérance et l'accoutumance ?
 - Quel est l'état des connaissances quant aux effets psychologiques du cannabis, notamment la dépendance ?
 - Quel est l'état des connaissances quant aux diverses formes de traitement des dépendances, leurs effets, leurs impacts et leurs coûts ?
- *Aspects juridiques en droit national en matière de cannabis.* La réglementation et le contrôle des drogues au sein des frontières canadiennes repose sur un dispositif législatif fédéral, même si, pour les aspects relatifs au traitement par exemple, la responsabilité relève des provinces et des territoires. Au delà du droit positif, les tribunaux ont proposé des interprétations des lois et réglementations pertinentes, notamment en matière de pouvoirs policiers. Invoquant les disciplines du droit, de l'histoire, de la sociologie, et de la criminologie, il conviendra de faire le point sur l'origine et les évolutions de ce dispositif. Les principales questions guidant ce troisième volet du programme de recherche sont :
 - Quel est l'historique des modes de réglementation et de contrôle du cannabis ?
 - Comment a évolué sa pénalisation ?
 - Quel est l'état de la jurisprudence nationale quant à la validité des lois et règlements qui régissent et contrôlent la production, la consommation, la possession et l'échange de cannabis ?
 - Quel est l'état de la jurisprudence interne quant aux modes d'enquête et aux sentences ?

- Quels sont les effets de la criminalisation du cannabis, notamment sur le système de justice, les institutions carcérales et les trajectoires délinquantes ?
 - Quels sont les coûts économiques et sociaux de ces modes de réglementation, de contrôle et de pénalisation ?
 - Quelles sont les relations entre les politiques et législations de justice et les politiques de santé publique ?
- *Aspects juridiques internationaux de la réglementation des drogues illicites et du cannabis.* Le Canada est signataire d'un certain nombre de traités et de conventions balisant la production, le trafic et la possession des substances psychoactives. Il nous fallait déterminer dans quelle mesure ces instruments sont contraignants sur la législation nationale. De plus, ces traités et conventions s'inscrivent dans le contexte plus large d'autres instruments internationaux, notamment les conventions et traités qui définissent et garantissent les droits fondamentaux des personnes; il convenait d'examiner leurs interrelations. Enfin, les drogues sont un enjeu des relations internationales et notamment des relations entre le Canada et les États-Unis. Quoique non contraignants sur un plan juridique, ces éléments peuvent influencer sur les orientations des politiques et méritent, en ce sens, d'être explorés. Les principales questions sont :
- Quels sont les principaux traités et conventions concernant les drogues, leur histoire et leurs dispositions ?
 - Quelles sont les contraintes que ces conventions et traités imposent au Canada ?
 - Au delà des traités et conventions, quels éléments du contexte des relations internationales pèsent sur les choix de politiques internes au Canada en matière de contrôle et réglementation des drogues ?
 - Quels sont les modèles de contrôle et réglementation des drogues en vigueur dans divers pays, quels en sont les impacts, et dans quelle mesure pourraient-ils s'appliquer au Canada ?
- *Aspects éthiques et opinions et normes de conduite des Canadiens.* Les choix de politiques et orientations législatives en matière de drogues sont aussi guidés par des considérations d'ordre éthique et moral et par les normes auxquelles adhèrent les Canadiens. Les principales questions sont :
- Quelles sont les considérations éthiques pertinentes au choix des orientations politiques et juridiques quant à la consommation, à la production, à la possession et à la circulation des drogues ?
 - Quelles sont les considérations éthiques pertinentes en matière d'usage thérapeutique du cannabis et de traitement médical et psychologique des dépendances ?

- Quel est l'état des normes de comportement des Canadiens en matière de cannabis ?
- Quel est l'état des opinions et normes de tolérance des Canadiens?
- Quel degré de correspondance existe-t-il entre les considérations éthiques et les normes de tolérance des Canadiens?

Vaste programme, on le voit. Pour tenter de répondre à ces questions de la manière la plus efficace en même temps que la plus économique possible, le Comité a convenu de mener deux tâches de front : un programme de recherche et un programme d'audiences de témoins experts devant se compléter mutuellement.

Le programme de recherche

Ne disposant ni de budgets de recherche nous permettant de commander des études ni d'un personnel de recherche à plein temps, nous avons demandé à la Bibliothèque du Parlement de produire des synthèses de la littérature pertinente.³ Ces travaux se déclinent en trois grandes catégories :

- Des études à caractère juridique : analyses de la jurisprudence nationale et des conventions et traités internationaux ;
- Des études à caractère socio-criminologique : analyses de la relation entre drogues et criminalité ; de l'évolution des dénonciations, des mises en accusation et des sentences ; des pratiques de consommation de cannabis ; des aspects économiques des drogues ;
- Des études comparatives : synthèse des politiques publiques dans certains pays.

De plus, nous avons bénéficié d'une synthèse des connaissances sur les impacts physiologiques et psychologiques du cannabis.⁴ Enfin, nous avons pu faire produire une étude qualitative des opinions et attitudes des Canadiens par une firme professionnelle d'enquêtes publiques.⁵

³ On trouvera la liste complète des études produites par la Bibliothèque du Parlement à l'Annexe 3. Tous les rapports de recherche, y incluant ceux qui sont mentionnés infra aux notes 6 et 7 sont disponibles en ligne à l'adresse Internet du Comité : www.parl.gc.ca/drogues-illicites.asp. Le Comité souhaite exprimer ici son appréciation la plus vive quant aux travaux réalisés pour lui par la Division de la recherche de la Bibliothèque du Parlement.

⁴ Wheelock, B. (2002) *Les impacts physiologiques et psychologiques du cannabis : une synthèse de la littérature*. Ottawa : Sénat du Canada. Rapport préparé pour le Comité spécial du Sénat sur les drogues illicites. (Le Comité tient ici à remercier tout particulièrement la Sénatrice Rossiter qui a rendu possible la préparation de ce travail). Disponible en ligne à l'adresse www.parl.gc.ca/drogues-illicites.asp

⁵ Léger Marketing (2002) *Étude exploratoire auprès des Canadiens sur l'usage du cannabis*. Ottawa : Sénat du Canada. Rapport préparé pour le Comité spécial du Sénat sur les drogues illicites. Disponible en ligne à l'adresse www.parl.gc.ca/drogues-illicites.asp

Au total, le Comité a ainsi obtenu 23 rapports d'étude et a bénéficié de comptes-rendus de travaux menés dans d'autres pays, notamment par le biais de la participation à des conférences internationales.

Audiences de témoins experts

Conscients des limites du programme de recherche, mais surtout de la nécessité d'interroger de vive voix certains des chercheurs dont les travaux étaient cités dans les études réalisées et de confronter leurs analyses entre elles et avec les positions d'autres organismes experts (les forces policières par exemple), nous avons mené une série d'audiences de témoins experts à Ottawa ainsi que dans certaines villes à travers le pays.⁶

Les audiences ont commencé le 16 octobre 2000 sous le 36^e Parlement et ont repris le 30 avril 2001 sous le 37^e. Elles ont pris fin le 10 juin 2002 par l'audience à Ottawa des principaux ministères responsables des politiques sur les drogues illicites au Canada. Dans la mesure du possible, le Comité a maintenu un rythme soutenu d'audiences, soit à toutes les deux semaines.

Dans chaque cas, le Comité demandait aux témoins de préparer un texte écrit répondant à des questions factuelles spécifiques. En effet, le Comité n'attendait pas des experts qu'ils lui donnent leurs opinions, ni qu'ils lui disent quoi penser. Les audiences de témoins experts s'inscrivaient en effet dans la logique d'une démarche de connaissance. Sachant que notre capacité à mener des études était limitée et reconnaissant que les données issues de la recherche étaient incomplètes, sinon contradictoires, nous voulions profiter pleinement de cette occasion exceptionnelle de clarifier, et de faire mieux connaître, un certain nombre d'éléments de connaissance.

Qui étaient ces experts ? Comment le Comité les a-t-il choisis ? Ces questions sont importantes dans la mesure où un certain nombre d'intervenants ont questionné la crédibilité du Comité en raison précisément de certains des choix qu'il a faits. Premièrement, nous avons tenu à couvrir chacun des grands domaines d'interrogation. Nous avons donc entendu des sociologues et des juristes, des psychologues et des médecins, des policiers et des criminologues. Deuxièmement, nous voulions entendre le plus grand nombre possible d'experts canadiens provenant de ces divers horizons de recherche. Troisième critère, nous avons retenu principalement des experts reconnus pour leurs publications dans le domaine. Des chercheurs tels les professeurs Harold Kallant ou Marie-Andrée Bertrand qui avaient été associés de près aux travaux de la Commission Le Dain il y a trente ans ; des chercheurs associés de près aux grands instituts que sont le *Centre on Mental Health and Addiction* de l'Ontario (anciennement *Addiction Research Foundation*) ou au Centre canadien de lutte à l'alcoolisme et à la toxicomanie. Enfin, des experts qui pouvaient, dans certains cas, parler au nom de

⁶ On trouvera la liste complète des témoins entendus, les sujets, les lieux et les dates à l'Annexe 2. Tous les témoignages et certains documents complémentaires que nous fournissaient les témoins sont disponibles en ligne à l'adresse du Comité www.parl.gc.ca/drogues-illicites.asp.

grandes institutions : l'Association médicale canadienne, la Fédération canadienne des municipalités, l'Association canadienne des Chefs de Police ou la Gendarmerie royale du Canada. Si l'on regarde attentivement la liste des experts entendus et les objets de leurs présentations, on s'apercevra qu'ils correspondent étroitement à l'ensemble de nos champs de préoccupation.

Lorsque les audiences portaient sur la situation dans d'autres pays, nous avons cherché un équilibre entre les personnes capables de décrire la politique publique et des chercheurs dont les travaux étaient reconnus dans leur pays voire internationalement. La durée et le nombre de nos audiences étant limités, nous avons dû faire des choix. Au mieux, nous pouvions entendre quatre personnes. Règle générale, nous avons tenté de choisir un haut responsable de l'administration et trois chercheurs.

De même, on pourra questionner le choix des pays auditionnés : France, Pays-Bas, Suisse. Nous avions initialement prévu d'auditionner le Royaume-Uni, notamment parce que ses politiques publiques en matière de drogues ont fait l'objet de nombreuses études de grande qualité. Malheureusement, les modifications en cours de préparation dans ce pays ont empêché de tenir ces audiences. De même, nous avons manqué de temps pour entendre la Suède ainsi que l'Australie. Par contre, nous avons tout de même fait préparer sur chacun de ces pays des documents de synthèse par la Bibliothèque du Parlement.

Le cas des États-Unis mérite quelque attention. Le chapitre 20 décrit la politique américaine en matière de drogues. Toutefois, nos audiences sur notre grand voisin, beaucoup plus complexe et moins monolithique qu'on ne le pense souvent, ne nous ont pas permis d'entendre les responsables de l'administration américaine. Ce n'est pas faute d'avoir essayé de le faire. Mais soit comme dans le cas du directeur du très prestigieux *National Institute on Drug Abuse* (NIDA) il a remis sa démission la semaine précédant la date prévue des audiences après avoir accepté notre invitation, soit comme dans le cas du Directeur du *Office of National Drug Control Policy* à Washington, il a décliné notre invitation. Bref, nous demeurons insatisfaits de n'avoir pu entendre les hauts fonctionnaires responsables des politiques sur les drogues aux USA. Néanmoins, le 10 juin 2002 nous avons pu rencontrer, en audience privée, M. G.R. Hanson le nouveau directeur du NIDA, et le 11 juin, nous avons reçu à huis-clos M. Walters, le Conseiller national sur les drogues de la Maison-Blanche, et quelques membres de son équipe.

Au total, que ce soit à Ottawa ou dans les villes canadiennes, le Comité a tenu plus de quarante jours d'audiences publiques, entendant plus d'une centaine de personnes de tous les horizons.

Une note encore. On pourra dire que nous n'avons pas traité de la même manière les témoignages des experts de la recherche et ceux de la pratique. C'est vrai pour partie. En effet, dans la mesure où les chercheurs présentaient des données se prêtant à un examen critique, des données vérifiables ce qui ne signifie pas qu'elles soient pour autant des preuves, portant sur des sujets précis, et permettant de répondre peu à peu à nos interrogations empiriques, nous leur avons accordé une importance certaine qui sera reflétée dans les citations qui émailleront ce rapport. Les données de la pratique ne

sont pas, en soi, moins significatives ni importantes à nos yeux. Par contre, les praticiens avaient souvent davantage tendance à exprimer des opinions plutôt qu'à faire état de données d'études. De plus, ils n'avaient pas la même préoccupation de répondre de manière précise aux questions qui leur étaient adressées. Ces opinions sont importantes, comme le sont celles des Canadiens que nous avons entendus et qui nous ont écrit. Ce sont néanmoins des opinions, non des données systématiques et rigoureuses.

Le défi de la synthèse

Devant cette masse d'informations, le plus grand défi demeurerait celui de la synthèse. La littérature scientifique sur n'importe lequel des sujets abordés, notamment ceux qui ont trait aux effets du cannabis ainsi qu'aux usagers et aux modes d'usage, est abondante. Les experts nous ont fait état de leurs recherches et de celles d'autres chercheurs. Les rapports préparés à notre demande sont truffés d'informations. Et notre équipe de recherche s'est tenue à l'affût des publications récentes et a participé à diverses conférences scientifiques internationales. Bref, il s'agissait de faire sens de toute cette information, une information de surcroît parfois contradictoire.

Au même moment, sur certains sujets, tels les tendances d'usage du cannabis et des autres drogues au Canada (chapitre 6), ou sur la spécificité des applications thérapeutiques du cannabis qui ne dépasse souvent pas le niveau de l'anecdote (chapitre 9), ou tout simplement sur les pratiques policières (chapitre 14) et les décisions des tribunaux du pays (chapitre 15), les données demeurent encore fragmentaires.

Synthèse donc qui signifie aussi faire des choix. Tout en demeurant le plus respectueux de la diversité des perspectives, nous devons tout de même dégager des conclusions. Quitte à accepter que ces conclusions soient préliminaires. Quitte à accepter même qu'elles soient contredites par des recherches ultérieures. C'est bien là le propre du processus de connaissance d'être toujours en mouvement, et nous acceptons cet état de fait. De là, nous sommes conscients que nous nous ouvrons à la critique. Tant mieux pourrions-nous ajouter. D'abord parce que la critique suscitera des débats publics. Ensuite parce qu'elle provoquera sans doute la curiosité de chercheurs qui iront faire la vérification empirique de certaines de nos conclusions, améliorant ainsi l'état du savoir. Et aussi parce que nos choix s'éclairent à la lumière des principes directeurs qui sont explicités au chapitre suivant.

TENIR COMPTE DES OPINIONS

L'opinion publique est chose difficile à saisir. D'abord parce qu'elle n'existe pas en soi mais qu'elle est créée : elle le sera par la manière dont sont posées les questions du sondeur ; elle le sera par la manière dont les médias d'information construisent les contours d'un débat ; elle le sera encore par un contexte plus large de représentations, dont on ne sait jamais exactement quels sont les déterminants réels.

Saisir l'opinion publique sur un sujet complexe comme celui des drogues, ce n'est pas demander le type de lessive qu'on va acheter au supermarché. Une question en apparence simple devient rapidement complexe dès qu'on ouvre la boîte de Pandore. Une enquête d'opinion publique peut demander au public s'il est en faveur de la décriminalisation du cannabis. Soit. Mais sait-on si chacun met la même chose dans le terme décriminalisation ? On verra au chapitre 21 la complexité de ce terme. Sait-on si les répondants sont en faveur ou en défaveur pour les mêmes raisons ? Et une fois qu'on aurait une majorité pour ou contre, sait-on quelles seraient les modalités d'application de ce choix de politique publique ?

Ceci étant, tenir compte de l'opinion est une nécessité en démocratie. En tenir compte signifiait pour nous deux choses étroitement reliées. La première, signifiait un devoir d'information, voire d'éducation. Souhaitons qu'on nous pardonne le choix de ce terme si l'on y trouve offense. Mais nous sommes convaincus que, sur des sujets de politique publique qui sont des enjeux de société, il est du devoir des responsables politiques de transmettre une information qui fasse œuvre de pédagogie et non simplement de conviction. En matière de drogues illicites, même de cannabis qui est pourtant la drogue la mieux connue, le niveau de connaissances demeure souvent limité et il circule encore beaucoup de mythes. La seconde signification de cette nécessité de tenir compte de l'opinion publique impliquait pour nous d'aller à sa rencontre. Nous y sommes allés de trois manières.

Primo, nous avons fait connaître nos travaux le plus largement possible et de la manière la plus transparente possible pour permettre à tous et chacun d'en prendre connaissance et d'y réagir. Beaucoup ont choisi de le faire en nous écrivant. Évidemment, c'est peu de personnes au regard du nombre de citoyens du pays.

Secundo, nous avons commandé une étude qualitative d'opinion publique. Ces groupes de discussion, menés à travers le pays, seront présentés plus en détail au chapitre 10.

Et tertio, nous avons tenu des audiences publiques dans diverses villes du pays (10 au total), permettant ainsi à un certain nombre de citoyens de venir nous dire ce qu'ils pensaient, ce qu'ils connaissaient, ce qu'ils vivaient.

Informé et aller à la rencontre de l'opinion publique, nous en sommes conscients, c'est aussi contribuer à la former. Ce n'est donc pas un geste neutre.

INTERPRÉTER À LA LUMIÈRE DE PRINCIPES

Toute cette connaissance, celle issue de la recherche aussi bien que celle issue de l'opinion du public, demande encore à être interprétée. Les connaissances scientifiques sont sujettes à vérification constante. Elles sont parfois contradictoires, comme on le verra dans les chapitres 7 et 8 notamment. Quant à la connaissance de l'opinion publique, elle demeure nécessairement fragmentaire et en évolution. De là découle une place importante à l'interprétation.

Au delà, une politique publique, nous l'avons dit plus haut, n'est pas informée que par les connaissances, aussi rigoureuses soient-elles. Il faut des principes directeurs, capables d'informer l'interprétation des données et en même temps de guider le choix des conclusions. C'est l'objet du chapitre suivant, qui présente nos principes et décrit la démarche que nous avons entreprise pour nous donner des principes directeurs.

CHAPITRE 3

NOS PRINCIPES DIRECTEURS

De quoi devrait être faite une politique publique sur les drogues illicites, politique étant entendue ici au sens premier de gouvernement par le débat public et non de politique de partis ? Appartenant au Sénat du Canada, donc au Parlement, et dotés d'un pouvoir législatif, l'on pourrait trouver étrange que nous posions cette question. Ne sommes-nous pas, législateurs, guidés par les principes du bon gouvernement, c'est-à-dire par l'intérêt général ? Pour autant, qu'est-ce que l'intérêt général ? Et comment le déterminer ? Notre position de sénateurs nous confère-t-elle *de facto* une capacité à dire ce qui est ou devrait être l'intérêt de la nation canadienne ? Nous ne le pensons pas.

Devant des enjeux de société comme celui des drogues illicites, nous sommes comme tout un chacun des citoyens, aux prises avec nos croyances, nos connaissances, nos valeurs, nos doutes, nos mythes. Notre accès privilégié à une centaine de témoins experts, la lecture de nombreux rapports de recherche et le dialogue avec des dizaines de citoyens à travers le pays nous ont obligés à confronter nos idées préconçues, nos représentations, à celles des « autres », et sinon à les modifier du moins à les raffiner en cours de route. Mais cela ne suffit pas à déterminer l'intérêt général. Les experts, pas plus que les quelques citoyens entendus, ne forment l'intérêt général de la société. Les études ne révèlent que la partie superficielle de ce que pensent les Canadiens. Et quand des enquêtes sophistiquées nous auraient fourni une lecture approfondie de l'état de l'opinion publique, nous ne serions guère plus avancés pour décider des orientations d'une politique publique sur le cannabis. D'abord parce que le bien collectif ne se décide pas à coup de sondages pour déterminer dans quel sens va l'opinion. Et aussi parce que, comme nos opinions personnelles, l'opinion publique repose sur des informations non vérifiées, sur des préconceptions parfois biaisées, sur des valeurs pas toujours explicitées.

Très souvent, on nous a dit que les choix de politique publique que nous ferons doivent se centrer sur l'avenir des enfants, sur le type de société dans laquelle nous voulons vivre et que nous voulons leur léguer. La société canadienne a mis en place, depuis une vingtaine d'années, des programmes coûteux de prévention du tabagisme ; voudrait-on les contredire en permettant le fumage du cannabis ? Le cannabis est une substance psychoactive qui peut altérer certaines facultés cognitives reliées à l'apprentissage chez les jeunes ; veut-on leur transmettre le message qu'il est ok de consommer des drogues ?

D'autres nous ont dit que les valeurs fondamentales de la société canadienne, valeurs de respect des droits et libertés des personnes, de tolérance et d'ouverture à la diversité étaient compromises par les lois actuelles sur le cannabis. N'étant plus en phase avec la société, traduisant une opposition de générations entre les adultes et les jeunes, ces lois, ont-ils ajouté, entraînent plus de conséquences négatives qu'elles ne concourent au bien commun, et en plus d'être inefficaces elles sont iniques.

Question de valeurs donc, qui oppose diverses conceptions de la santé publique, de la santé d'une collectivité entendue aussi bien au sens de la santé physique des personnes que de la santé de la collectivité tout entière, dans sa fibre morale ainsi que dans les modèles de relation à soi-même et à l'autre qu'elle propose. Mais les valeurs des uns ne sont pas celles des autres.

En ce monde fragmenté, voire désillusionné qui est le nôtre, mais un monde qui est aussi, même si ce n'est pas toujours par choix, un monde ouvert au partage des cultures et des identités, se pose crûment la question des valeurs et par là du sens de la vie en société. Même s'agissant des valeurs transcendantales du respect sacré de la vie et de la justice immanente que nous partageons tous, leur traduction en politiques publiques n'est pas chose immédiate ou simple : pensons ici aux questions de l'avortement ou de la peine capitale. Quant aux autres ordres de valeurs, celles de la liberté, de la vérité, ou du droit, ils sont des enjeux incessants de débats dans les sociétés démocratiques et ce sont précisément ces ordres de valeurs qui sont en jeu dans une politique publique sur les drogues illicites.

Il y a trente ans maintenant, la Commission Royale d'enquête sur l'usage non médical des drogues, la Commission Le Dain du nom de son commissaire principal, a étudié des questions similaires à celles que nous étudions aujourd'hui. Son rapport sur le cannabis, dont les conclusions scientifiques sur ses effets étaient généralement acceptées par tous les commissaires, a néanmoins donné lieu à ... trois rapports : un rapport majoritaire de trois commissaires et deux rapports minoritaires. Lors de notre toute première journée d'audiences publiques, la professeure Line Beauchesne nous a présenté ainsi les divergences de fond entre les commissaires :

« La différence de leur rapport est essentiellement sur les valeurs sur lesquelles ils forment une politique en matière de drogues. Je vais me servir de ce rapport pour illustrer les trois grandes positions qu'on peut avoir à ce sujet.

La première position est celle de Ian Campbell. C'est ce qu'on appelle en droit le moralisme juridique. Une politique publique fondée sur le moralisme juridique en matière de drogue permet de justifier la prohibition actuelle et les répressions qui en découlent au nom de la protection des valeurs communes. (...) Pour la résumer en quelques mots, disons qu'on attribue à l'État la fonction de créer des valeurs communes qu'on va imposer à l'ensemble de la population de manière à créer le maximum d'harmonie sociale possible. Si tout le monde pense pareil, cela crée moins de problèmes.

(...)
La deuxième position qui était la position dominante de la Commission Le Dain se fonde sur le paternalisme juridique. Une politique publique fondée sur le paternalisme juridique en matière de

drogues permet de justifier la prohibition actuelle au nom du rôle de l'État en matière de protection des personnes non autonomes, surtout les jeunes.

(...)

Lorsqu'on arrive à la troisième position, celle de Marie-Andrée Bertrand qui demandait la légalisation du cannabis, on arrive aux questions des valeurs (...). Le libéralisme juridique signifie que l'État assume une certaine responsabilité pour maximiser l'autonomie des citoyens. (...) Une politique publique fondée sur le libéralisme juridique en matière de drogues est une approche qui se fonde sur le fait que le rôle de l'État est celui de maximiser la possibilité pour chacun d'être un citoyen à part entière et que l'usage du droit pénal est toujours un échec. »¹

Moralisme : affirmer des valeurs communes. Paternalisme : protéger les plus faibles. Et libéralisme : maximiser l'autonomie des citoyens. Ces trois catégories n'épuisent pas le champ des possibles : le communautarisme par exemple est une autre approche. Et, à certains moments, dans certains domaines de l'action publique, ces diverses approches peuvent coexister. Néanmoins, chacune d'elles exprime des conceptions divergentes quant au rôle de l'État et du droit pénal, et quant aux rôles de la science et de l'éthique dans les choix qui doivent être faits.

C'est précisément à travers le prisme d'une réflexion sur chacun de ces objets que nous avons choisi de nous donner des **principes directeurs** qui rendent explicites la conception que nous nous faisons du rôle que doivent jouer l'État, le droit pénal, la science et l'éthique dans une politique publique sur le cannabis. Ces principes nous guideront ensuite dans l'analyse que nous ferons des informations issues de la recherche et des pratiques actuelles au Canada, et surtout ils nous influenceront dans nos décisions de recommandations. Ce faisant, les lecteurs bénéficieront de notre tentative de rendre explicites des principes qui demeurent trop souvent implicites, donnant ainsi à chacun la possibilité qui de nous critiquer pour cause d'incohérence, qui d'affirmer son désaccord avec nos conclusions pour cause de non partage de ces principes. Nous pensons que l'exercice a l'avantage de la clarté et de la transparence.

Pour nous aider à la préparation de ces réflexions sur les principes directeurs, nous avons demandé à quatre universitaires canadiens reconnus pour leurs travaux dans leur champ de réflexion et pour leur indépendance, de préparer des documents de réflexion sur chacun des quatre grands enjeux : la gouvernance, le droit pénal, la science et l'éthique.² Nous ne saurions trop encourager les Canadiens à lire ces textes d'une

¹ Professeure Line Beauchesne, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, deuxième session de la trente-sixième législature, 16 octobre 2000, fascicule1, pages 33-36.

² Ce sont : R. Macdonald, professeur de droit constitutionnel et de droit public, Université McGill, *La gouvernance de l'action humaine* ; A.P. Pires, professeur de criminologie, Université d'Ottawa *La politique législative et les crimes à « double face » : Éléments pour une théorie pluridimensionnelle de la loi criminelle* ; T. de Koninck, professeur de philosophie, Université Laval *Le rôle des savoirs et de la culture dans la politique publique sur les drogues illicites* ; et J.F. Malherbe, professeur de travail social, Université du Québec à Montréal, *Contribution de l'éthique à la définition de principes directeurs pour une politique publique sur les drogues illicites*. Ces textes sont accessibles en ligne à : www.parl.gc.ca/drogues-illicites.asp

richesse et d'une qualité exceptionnelles. Pour notre part, nous nous en servirons librement sans avoir la prétention de rendre la complexité de leur pensée ni nous en faire simplement les perroquets. De même que nous ne demandions pas aux témoins de nous dire quoi penser, mais bien de nous faire part, avec le plus de rigueur et d'exactitude possible, de leurs connaissances, qu'elles soient issues de la recherche ou de la pratique, de même nous avons demandé des documents de réflexion et non des réponses à nos questions. Il nous appartient, et c'est ce qui est attendu de nous, de proposer nos propres réponses aux enjeux auxquels les drogues illicites nous confrontent.

Nous débutons par une réflexion sur l'éthique. Nous pensons en effet que la réflexion éthique, en ce qu'elle touche aux fondements mêmes des valeurs, en ce qu'elle impose aussi une exigence de communication et de dialogue³, constitue la pierre d'assise sur laquelle reposent les autres principes. À cette conception éthique, s'articulent ensuite des principes relatifs à la gouvernance – c'est-à-dire au rôle de l'État – et au droit pénal comme l'un des outils de la réalisation des conditions de vie en société. Nous terminons sur des considérations relatives au rôle de la science, ou plus proprement des savoirs.

L'ÉTHIQUE, OU LE PRINCIPE DE L'AUTONOMIE RÉCIPROQUE

Supposons que la science aurait démontré, statistiques à l'appui, la nocivité de telle drogue – pourquoi pas le tabac – et qu'elle est une « cause » de maladies graves, voire mortelles. Jusqu'où le médecin, le juge, et en bout de piste l'État, sont-ils autorisés à aller pour faire en sorte que les personnes ne fument pas ? Quelle est la limite de l'intervention des uns et des autres ? C'est la question que nous pose l'éthique, spécifiquement ici l'éthique de la « santé ». Devrait-on tout simplement interdire le tabac et punir ceux qui en consommeraient aussi bien que les producteurs ? Devrait-on éduquer à coups de campagnes de prévention ? Devrait-on tenter de dissuader les

³ Voir là-dessus les travaux du sociologue et philosophe allemand Jürgen Habermas, notamment *De l'éthique de la discussion*. Paris : Cerf. L'auteur y présente le processus de discussion éthique comme suit : « Dans les argumentations, les participants doivent partir du fait qu'en principe tous les concernés prennent part, libres et égaux, à une recherche coopérative de la vérité dans laquelle seule peut valoir la force sans contrainte du meilleur argument. La discussion pratique est considérée comme une forme exigeante de formation argumentative de la volonté qui (...) doit garantir par les seules présuppositions universelles de la communication, la justesse de tout accord normatif possible conclu dans ces conditions. (...) D'autre part, la discussion pratique se laisse concevoir comme un processus d'intercompréhension qui, d'après sa forme même, assigne à tous les participants en même temps l'adoption idéale de rôle. Il transforme donc cette adoption idéale de rôle effectuée par chacun en particulier et *privatim* en une opération publique pratique par tous intersubjectivement en commun. » (pages 18-19).

fumeurs par l'imposition de conséquences économiques, par exemple, une surtaxe pour les soins hospitaliers que leur habitude pourrait entraîner ?

On voit que la réflexion éthique nous mène à passer de l'étant, du domaine du fait, au domaine du devoir être, de ce qui serait souhaitable. Passage donc du fait constaté (la cigarette « cause » le cancer du poumon) à la norme (il est admis par le plus grand nombre que fumer est nocif), mais bien plus qu'à la norme aux valeurs (la santé est le plus grand bien) et finalement aux moyens de transmettre et surtout de faire appliquer cette valeur (il est interdit de fumer sous peine d'une amende). Or, à chacune de ces étapes, certains d'entre nous peuvent élever la voix et dire : attendez, je ne suis pas d'accord. Pas d'accord avec l'énoncé de fait : sur quelles bases, sur quelles études, repose ce « constat » demandera celui-ci. Pas d'accord avec la norme : quand bien même un sondage d'opinion démontrerait que le plus grand nombre croit que la cigarette cause le cancer du poumon, est-ce suffisant pour clore le débat ? Pas d'accord avec la valeur érigée : ce n'est pas la santé mais la liberté qui est le plus grand bien ; à quoi sert d'être en santé sous un régime totalitaire ? Et finalement avec les moyens mis en œuvre : il est inadmissible de prohiber la cigarette sous prétexte qu'elle causerait des cancers car le moyen est disproportionné par rapport au fait.

Quiconque a un peu suivi les débats sur le cannabis aura fait le parallèle. Puisque le cannabis « cause » des torts à la santé (physique ou morale), la norme édicte que sa consommation est « dangereuse » et, au nom d'une valeur de santé publique (et de protection des plus faibles : enfants, adolescents etc.), il sera prohibé d'en produire, fabriquer, vendre, consommer, etc. C'est le fondement de la politique publique actuelle.

Comme nous le rappelle le professeur Malherbe, cette manière de poser le problème du cannabis – comme des autres substances d'ailleurs – nous invite à repenser la conception que l'on se fait de la santé, et par là de la médecine et de la science. Et plus loin encore, nous oblige à penser la question du risque et de la vie en société elle-même.

Nous vivons dans une société du risque, mais d'une manière paradoxale. D'un côté, nous valorisons la prise de risque : capital à risque, gestion du risque, ne s'imposer aucune limite pour réussir. On le voit aussi bien dans la valorisation de certains types de décision politique ou corporative, que dans l'émulation de certaines activités risquées, courses de formule 1, parapente, et autres sports extrêmes. De l'autre côté, nous devenons intolérants aux risques de la vie en société, aux risques que l'autre représente pour notre vie individuelle. C'est la quête de la sécurité, individuelle ou collective, contre le petit délinquant ou contre le terroriste. Le risque s'opposerait à la sécurité comme la maladie à la santé.

Or, entre ces deux attitudes apparemment opposées par rapport au risque, un subtil changement de référent se glisse qui explique pour partie le paradoxe. Dans la première acception (les risques que nous aimons prendre ou tolérons que les autres prennent) il s'agit bel et bien de risque. Ici, le risque est positif, il ouvre sur une augmentation du champ d'action : placé devant ce type de risque, l'acteur peut décider

de foncer, d'attendre, de renoncer. C'est, en tout cas, une expansion du champ des possibles, donc de l'autonomie, expansion qui n'est sans doute pas étrangère à l'admiration que ces personnes suscitent et qui est faite aussi d'un brin d'envie devant cette ouverture sur l'action que notre condition d'êtres « ordinaires » ne nous fournit que rarement. Le glissement de sens se produit avec la seconde acception qui ne renvoie pas à la notion de sécurité mais plutôt à la notion de danger. La sécurité est un bien collectif et individuel : pensons à la sécurité alimentaire, à la sécurité du travail. Par contre, le danger est, la plupart du temps, une privation, une limitation de la liberté d'action : devant le danger, la plupart d'entre nous nous arrêtons, nous retirons de l'action. En ce sens, le danger réduit la zone d'autonomie. Ce n'est donc pas la sécurité qui s'oppose au risque, mais le danger.⁴ La distinction est fondamentale car elle renvoie au degré – réel ou perçu – de contrôle que chacun a sur son existence : nous sentons bien que le « *crazy canuck* » qui dévale les pentes est en contrôle – au moins relatif – des risques qu'il prend ; le danger a ceci de différent qu'il nous renvoie à la notion de perte de contrôle.

Nous en sommes, collectivement, à apprendre à gérer cette équation risque / danger. Le « risque » ici si l'on peut dire c'est de penser le risque comme une forme d'autonomie acquise pour soi, et le danger comme une limitation de cette autonomie par l'autre, entraînant dans son sillage les mouvements de repli sur soi, l'intolérance, bref la peur. Car si le risque peut être source de plaisir intense, le danger suscite généralement la peur. Et si le risque renvoie à l'amélioration d'outils qui me permettent d'être plus en contrôle de ma sécurité, le danger renvoie pour sa part au contrôle de ce qui est extérieur, au premier chef de l'autre.

Or, certaines conceptions de la médecine, de la science plus généralement, ajoutent au paradoxe lorsqu'elles parlent de facteurs de risque comme lorsqu'elles disent : fumer est un facteur de risque de cancer du poumon. De même en prévention de la délinquance : le décrochage scolaire est un facteur de risque de délinquance. Dans ces acceptions, le risque devient ici facteur de danger, le danger terminal étant bien sûr la mort (cancer). Cette conception mécaniste et causaliste de la prévention gomme la différence fondamentale entre le corps-machine que nous habitons et le corps-sujet que nous sommes, pour reprendre les distinctions que propose le professeur Malherbe. Il n'y a pas, en effet, une relation directe entre des caractéristiques « objectives » de notre environnement (incluant ici les caractéristiques personnelles de l'histoire génétique, familiale, culturelle, etc.) et la perception subjective que l'on a de soi et de sa relation avec son environnement. Pour le dire autrement, c'est exactement pourquoi deux enfants nés dans un environnement similaire, à la même époque, amis à la plus tendre enfance, prendront des chemins de vie tout à fait différents. Nous avons un bagage (le corps machine) ; ce que nous en faisons et comment nous interagissons avec ce bagage est une toute autre chose. Tout comme il n'y a pas de traduction immédiate du

⁴ Le professeur Pires en fait une discussion intéressante : pages 41 passim.

fait à la norme, de même il n'y a pas de passage immédiat de mes déterminations biopsychologiques à mes actions et à mes réflexions.

Cette conception scientiste travaillant à l'identification de la « norme » statistique – les corrélations entre deux facteurs – perd de vue que nous ne sommes pas tous à la même position devant cette équation risque/danger. Ce qui, pour certains est un risque – descendre une montagne glacée sur un ski – est pour d'autres un danger réel.

« En dépit de tout ce que l'on croit savoir des toxicomanies, un nombre considérable de sujets bien informés « continuent de se suicider allègrement » au petit jeu de leurs dépendances. Si l'éducation pour la santé est largement tenue en échec, et pas seulement dans le domaine des substances toxiques, ce ne peut être que parce que les sujets humains sont précisément des sujets, c'est-à-dire des être subjectifs dont les réactions de comportement sont liées bien davantage à la signification qu'ils attachent à leurs comportements qu'à l'objectivité des conséquences mécanico-médicales que l'analyse statistique prétend définir.

Il y a des risques qui valent sans doute la peine d'être courus pour que la vie vaille la peine d'être vécue, qu'elle ne se dissolve pas dans l'enchaînement maniaque et peureux de précautions sans fin (...). Finalement, qu'est-ce qui est le plus humain (le plus autonome oserions-nous demander) : succomber à l'hypocondrie craintive et s'enfermer dans le cocon de la prévention universelle (au point d'y mourir aboulique ou asphyxié) ou bien vivre sa vie au travers des risques librement choisis et assumés ? »⁵

D'où la position centrale du concept d'autonomie. Mais d'une autonomie conçue de manière critique comme *autonomie réciproque* et non comme d'une autonomie centrée sur l'individu isolé qui érige en norme son bon plaisir. Rappelons qu'autonomie signifie, étymologiquement, « se donner sa propre loi ». Il ne s'agit pas d'une loi arbitraire, faite pour soi seul, mais d'une loi qui impose de rendre possible, chaque fois où c'est possible, l'échange réussi avec l'autre, qui est le fondement même de la vie sociale. L'autonomie dont il est ici question repose donc sur la capacité de reconnaître la présence, la différence et l'équivalence de l'autre, permettant d'assumer respectivement la solitude, la finitude et l'incertitude, pour cultiver en retour la solidarité, la dignité et la liberté.⁶

La personne qui est « dépendante » n'est pas autonome dira-t-on. Et effectivement, dans cette sphère de leur vie, le toxicomane, l'alcoolique, le fumeur invétéré ne le sont pas. Pas davantage que la personne dépendante affective n'est pleinement autonome, ni celle qui aurait une addiction au jeu, à l'argent ou au sexe. La question suivante est de savoir jusqu'où, dans quelle mesure, l'État, la société, peuvent intervenir pour favoriser la lente conquête de cette autonomie. Et comment ? Quels sont alors les rôles de la gouvernance collective et du droit pénal comme outil de cette gouvernance ? Et comment la science pourrait contribuer à cet affranchissement ?

En tout cas, nous retenons, avec le professeur Malherbe que :

⁵ Malherbe, J.F. (2002) *op. cit.*, page 7.

⁶ Voir la discussion qu'en fait Malherbe aux pages 23-26.

« (...) le problème fondamental de notre civilisation n'est pas de savoir s'il est acceptable ou non d'interdire le commerce des dérivés du cannabis ou même leur consommation, mais bien de ne pas refouler l'expression de l'angoisse quand elle se fait jour, et mieux, d'inventer de nouvelles façons de l'appivoiser. À cet égard, il n'est pas inutile de rappeler que toute contrainte injustifiée qui viendrait s'ajouter au fardeau déjà lourd de l'individu civilisé, ne peut que multiplier chez ce dernier le sentiment d'être l'objet d'un quelconque totalitarisme plutôt que le sujet de sa propre destinée. De ce point de vue, les campagnes antidrogue apparaissent décidément comme des tentatives de nier la mort plutôt que d'en reconnaître la présence dans la vie collective comme dans la vie individuelle. (...) Nous rejoignons ici N. Bensaïd qui aime à dire que la médecine préventive occulte notre peur de la mort en nous faisant mourir de peur. »⁷

De cette assise découle une définition de l'éthique comme « un travail auquel on peut consentir, qui s'effectue les uns avec les autres, pour réduire l'inévitable écart entre nos valeurs pratiquées et nos valeurs affichées autant que faire se peut. »⁸ Travail avec, en effet, puisque cette autonomie ne peut s'exprimer sans un minimum de contraintes ; c'est le rôle de la gouvernance.

Nous retenons comme principe directeur qu'une politique publique éthique sur les drogues illicites, sur le cannabis en particulier, doit **favoriser l'autonomie réciproque construite à travers un échange dialogique constant au sein de la collectivité.**

LA GOUVERNANCE : MAXIMISER L'ACTION DES INDIVIDUS

Nous sommes des êtres sociaux. L'affirmation est triviale et cependant il est nécessaire de la rappeler puisque cela signifie que, *nécessairement*, nous nous trouvons toujours dans une situation paradoxale où chacun, doté (d'un certain degré) de libre-arbitre, prend des décisions librement pour lui-même et qu'en même temps, pour réguler les interactions avec les autres, nous établissons des règles, une normativité, plus ou moins complexe et plus ou moins formelle selon les cas. C'est vrai des relations de couple, des relations familiales, des joutes sportives, des relations de travail, comme des relations entre les citoyens et le gouvernement. La gouvernance de soi – acquise avec l'avènement de la démocratie libérale – n'est jamais entière et le cède inévitablement pour partie à la gouvernance par la collectivité.

La gouvernance est relativement facile à concevoir dans les relations simples : couple, famille, entreprise. Ce n'est pas dire que sa pratique soit simple : quiconque a une expérience de relations de couple saura dire à quel point il est parfois difficile de rendre explicites des règles implicites, et de s'entendre sur des règles de vie partagées. Néanmoins, la normativité qui s'établit entre amis, entre partenaires amoureux, entre parents et enfants, consiste en une série de règles relativement simples et surtout dont

⁷ *Ibid.*, page 21.

⁸ *Ibid.*, pages 27-28.

l'effectivité ne requiert pas, sauf lors de bris de relations ou d'abus, l'intervention d'autres parties.

Dans les sociétés féodales, pré-modernes ou pré-démocratiques, les règles prévalant aux relations sociales même simples étaient prescrites de l'extérieur : le souverain, le seigneur, le représentant de l'église, le père de famille ou l'ancêtre, le chef d'entreprise, chacun dans son domaine était tout puissant et pouvait ordonner et s'attendre à être obéi. L'établissement de la normativité se faisait largement sans l'implication des « sujets », sans leur consentement, sans qu'ils n'aient rien à dire ; ceux-ci étaient exclus du rapport de force. Au cours des siècles qui ont vu se construire les démocraties dans lesquelles nous vivons, nous sommes passés à des modes de gouvernement de soi et des autres permettant de plus en plus la participation des citoyens à l'élaboration des règles de la vie, aussi bien la vie personnelle que la vie sociale. Nous sommes aussi passés d'une situation où la vie de chacun était en quelque sorte réglée par son destin et fermée sur l'horizon étroit du lieu et des conditions de sa naissance, à une situation de vies « indéterminées », ouvertes sur la construction d'une identité et d'une destinée personnelle.

Changement donc dans les sources de normativité et leur opérationnalisation dans la vie sociale, et changement aussi dans les rapports à la normativité. Dans le premier cas, on assiste peu à peu à la formalisation externe des sources de normes de comportement. Ne découlant plus du droit divin, celui du souverain ou celui du prélat de l'église, les normes sont construites à partir de la traduction politique de la volonté du peuple. Elles s'inscrivent dans des constitutions nationales, dans des décisions judiciaires (la *common law* britannique) ou dans des codes de loi (le Code civil). Il s'ensuit que les normativités supra-juridiques (héritées de droit divin) ou infra-juridiques (non dites par la loi) perdent et de leur valeur symbolique et de leur capacité effective à orienter les rapports sociaux, au profit de règles juridiques enregistrées selon une procédure admise et légitime dans le corps social par des textes de loi. Les sociétés modernes sont des sociétés de droit, c'est-à-dire des sociétés qui reposent sur la primauté de la loi dans la gestion des rapports entre les personnes et entre les personnes, les groupes et les institutions. Jamais entièrement incorporées par l'ordre juridique, les autres sources de normativité n'ont pas pour autant disparu ; elles sont moins visibles (les normativités pré ou infra juridiques), parfois moins légitimes.

Au changement de source, correspond un changement d'opérationnalité : alors que le souverain ou le représentant de l'église pouvait condamner, voire exécuter, sans qu'il soit possible d'interroger la légitimité et la rationalité de leur décision – sauf à risquer une même condamnation – les moyens de rendre effective la volonté du peuple inscrite dans la légalité juridique passent aux mains de juges et du système judiciaire dans son ensemble. La normativité juridique est activée soit par l'autorité publique établie en droit (litiges d'ordre public et pénal par exemple), soit par les citoyens eux-mêmes (litiges d'ordre privé et civil) et rendue effective principalement par les tribunaux. Il existe des recours, et surtout ces recours sont théoriquement les mêmes pour tous et accessibles à tous.

Troisième modification, les relations qu'entretiennent les citoyens à la norme et, via la norme, à l'ensemble des aspects de la vie en société, changent aussi. La part du choix personnel et de l'incertain augmentent, jusqu'à mener, aujourd'hui, à un rapport non plus tant à l'autre qu'au risque que représente le fait d'être en contact avec l'autre. La normativité elle-même n'est plus acceptée comme une fatalité ni même comme une obligation. Sans qu'elle soit rejetée, la normativité sociale fait l'objet de questionnements sur la base d'expériences personnelles et d'une adaptation aux conditions individuelles d'existence. L'espace entre le sujet de la norme et la norme semble donc s'accroître en même temps que se formalisent les modes de résolution de conflits.

À travers la conjonction de ces processus, émerge une gouvernance de plus en plus instrumentalisée. Les instruments de la normativité, avocats, juges, tribunaux, acquièrent une importance parfois plus grande que les contenus eux-mêmes : la question immédiatement personnelle est de savoir si j'ai accès éventuellement aux mécanismes reconnus de résolutions de conflits, ou si j'en suis, par ma condition ou par mes actes, exclu d'une manière ou d'une autre. Pour le dire autrement, le moyen remplace la fin, la règle de droit remplaçant l'exigence de rapport à l'autre qui est au fondement de la normativité et de la vie sociale elle-même.

Les sociétés modernes sont donc confrontées à une série d'injonctions parfois paradoxales. La gouvernance collective doit : (1) permettre de réguler les rapports sociaux de la manière la plus ordonnée possible en même temps que la moins contraignante, (2) exprimer les normes et valeurs partagées par la collectivité en même temps que (3) laisser à chacun la possibilité de s'autodéfinir par rapport à ces normes et valeurs. Comment réconcilier ces oppositions du moins apparentes ?

À la suite des travaux du professeur Taylor⁹, on peut soutenir qu'il y aurait deux sphères centrales ou deux objets privilégiés de gouvernance : la gouvernance des relations à autrui et la gouvernance des relations à soi. La gouvernance des relations collectives fait évidemment partie des sphères d'intervention traditionnellement reconnues à l'État, même si les formes et le contenu en changent. Par contre, la gouvernance de soi ne tombe pas immédiatement ni systématiquement sous la sphère de l'État.

La gouvernance de la collectivité

L'État n'est pas la seule source de normativité, loin de là. Le fait cependant que l'État démocratique doive agir selon la loi, et que la plupart de ses politiques publiques s'inscrivent sous la forme de textes de loi, mène à une sorte de court-circuit où la source du droit et l'État se confondent.

Pourtant, comme le rappelle à juste titre le professeur MacDonald, si le champ d'action de l'État doit effectivement s'exercer en respect de la règle de droit, le champ

⁹ Notamment : Taylor, C., (1989) *Les sources du moi*. Montréal : Boréal.

du droit n'est pas limité à l'État. Dans toutes les sociétés connues, des règles ont toujours été établies pour gouverner le rapport à soi et aux autres. Elles sont implicites ou explicites, informelles ou formelles, d'application universelle ou restreinte, codifiées ou enregistrées dans la mémoire collective, extensives ou limitées à certains domaines d'action. Dans tous les cas, et quelles que soient la nature et la forme spécifique des règles, elles servent à exprimer les conditions du vivre ensemble parmi les membres de la communauté. Elles concernent le mariage et la parentalité, les manières de respecter la vie et le bien d'autrui, aussi bien que les rapports à l'invisible et à l'au-delà. Elles prennent la forme de prescriptions ou d'interdictions, sont mises en œuvre par l'évêque ou le mollah, par le souverain ou son représentant, ou par le juge. Contrairement à ce qu'on aurait tendance à penser, nous n'avons pas, modernes, inventé la codification des lois puisque le premier code juridique remonte à Hammourabi, roi de Babylone. En droit romain, Justinien a été le premier à proposer un code de lois. Et on pourrait encore citer les Tables de la Loi « remises » à Moïse.

En ce sens, nous rejoignons le professeur MacDonald sur le pluralisme juridique selon lequel il existe des sources multiples de normativité et donc de règles d'action que la loi formelle n'épuise pas. C'est la distinction entre la loi et la «juridicité». Comme nous l'écrivions plus tôt, la juridicité prend sa source aussi bien dans la famille que dans l'entreprise, à l'école que dans le syndicat, dans le parti politique et dans la religion. Les «lois», ne sont qu'une manière de gouverner le rapport à l'autre selon un ensemble convenu de règles. En ce sens, la juridicité «c'est l'entreprise d'assujettir l'action à la gouvernance par des règles.»¹⁰

La juridicité coexiste bien entendu avec d'autres manières de gouverner l'action des individus et des collectivités : l'exercice du pouvoir brut et la guerre pour ne nommer que celles-là en sont d'autres formes. L'une des différences majeures cependant entre la juridicité et ces autres formes tient à la nature et à la source de sa légitimité. Instaurer des règles d'action de forme juridique implique une forme d'assentiment sinon de participation active à l'élaboration et à la mise en œuvre de la règle, qualités que la domination par un tyran ou par une armée d'occupation n'ont pas besoin et ne cherchent pas à s'approprier.

L'élaboration d'une juridicité formelle, prenant la forme de textes de loi adoptés par les assemblées législatives, et prescrivant des droits objectifs aussi bien que subjectifs est au cœur de la modernité. C'est d'ailleurs largement autour de ces questions que se pose celle plus spécifique du rôle de l'État : quand et dans quelle mesure élaborer des règles juridiques formelles sur ces deux objets, et comment les faire respecter ?

Les sociétés modernes ont donc ceci de particulier qu'elles ont, entre autres choses, consacré la primauté de la loi formelle sur les autres sources de juridicité pour la gouvernance des relations sociales, établi la nécessité que ces lois formelles soient adoptées et mises en œuvre par les systèmes législatif et exécutif de l'État, et instauré

¹⁰ MacDonald, *op. cit.*, page 24 de la version anglaise.

des mécanismes d'arbitrage par un système judiciaire lui-même issue de l'État mais indépendant des deux premiers.

Ce formalisme de la loi, ou pour le dire plus précisément de la normativité à caractère juridique inscrit dans les textes de loi adoptés par l'État ne signifie nullement l'extinction des autres formes de normativité. Le professeur MacDonald en donne un exemple pertinent pour notre propos :

[Traduction] « *Ainsi, des comportements que la loi pénale stigmatise et sanctionne seront au contraire, dans certaines communautés normatives, récompensés et encouragés. Dans des quartiers défavorisés où les opportunités économiques sont limitées, la production et la vente de drogues illicites peuvent être une manière d'échapper à la pauvreté. Pour ceux qui réussissent, l'amélioration du statut social est souvent plus attrayante que la menace des conséquences négatives de la sanction pénale. De même, au niveau international, dans les pays où la culture de plantes menant à la fabrication de drogues illicites est une activité indigène traditionnelle, et où la pauvreté est telle que les bénéfices économiques qui en découlent sont nécessaires à la subsistance, le droit pénal (qu'il soit national ou international) sera de peu d'effet.* »¹¹

Autrement dit, la juridicité ne s'épuise pas dans la loi formelle, et le rôle de l'État dans la gouvernance collective ne se limite pas aux seuls processus d'adoption, exécution et arbitrage de lois formelles.

La gouvernance de soi

Historiquement, la juridicité a souvent été au plus près des normes morales, ou a cherché à s'y modeler. Ces normes morales pouvaient provenir de la religion, d'une philosophie, d'une éthique, voire d'une théorie de la nature universelle comme chez Platon. Dans tous les cas, elles cherchent à dire la vie bonne, que celle-ci consiste à se conformer aux règles immanentes de la vie, à mettre fin au cycle des réincarnations ou à éviter la damnation éternelle. Dans tous les cas aussi, la vie bonne correspondait largement à « la vie » en son sens le plus abstrait, c'est-à-dire qu'elle ne s'intéressait pas tellement au destin de chaque individu mais à la collectivité, au groupe, au clan.

Ce n'est qu'à partir de la seconde moitié du second millénaire, au cours de la période dite des Lumières, que la vie individuelle a commencé à s'inscrire peu à peu au cœur des préoccupations de la gouvernance de la collectivité. Ce changement majeur a fait en sorte que ce que Taylor appelle « la vie ordinaire », celle de « l'homme moyen sensuel », au cœur de laquelle se trouvent son rapport au monde et sa manière d'entrer en contact avec lui à travers les prismes privilégiés que sont la famille et le travail, a soudainement été reconnue. Auparavant généralement dépourvu de possibilités de participation à l'élaboration de la juridicité, le « citoyen » a alors acquis – on pourrait référer, pour simplifier, à l'exemple du droit de vote – un droit de regard et de

¹¹ *Ibid.*, page 25.

participation active non seulement comme membre de la collectivité mais comme individu unique et entier.

Les collectivités s'étaient jusqu'alors dotées d'une juridicité largement axée sur le rapport à l'autre, consacrant des droits objectifs forts – droit à la vie : tu ne tueras pas ; droit à la propriété : tu ne voleras pas ; etc., – et à composante cognitive faible : la démonstration du respect de la vie, même en admettant qu'elle a continué – et continue parfois malheureusement dans certains cas – à poser des difficultés même au cours du XX^e siècle – pensons ici à l'inégalité raciale ou aux inégalités entre les genres – cette démonstration du respect universel de la vie n'est pas celle qui a le plus posé problème. C'est en ce sens que nous parlons ici, à la suite notamment du travail de Pires discuté à la section suivante, de normes à composante cognitive faible. Ce sont des règles fondamentales, dont certains philosophes du droit ont dit qu'il s'agissait de droits naturels, qui ne requièrent pas une justification empirique forte. Il n'en va pas de même pour d'autres types de normes concernant des conduites telles l'homosexualité, l'avortement... ou l'ingestion de drogues. Ces normes concernent plutôt ce qu'on pourrait appeler des droits subjectifs qui touchent davantage, on le voit par la liste des exemples donnés, des comportements individuels exprimant des choix personnels se réalisant à travers un échange consensuel, et concernent donc peu ou moins directement la collectivité. C'est pourquoi on pourra dire qu'il s'agit de normes à composante cognitive forte : pour s'imposer comme droits négatifs, c'est-à-dire comme contraintes ou prohibitions, ces normes ont besoin d'une justification exogène provenant de savoirs externes à la juridicité elle-même.

Ainsi, parallèlement au processus de formalisation juridique des normes de gouvernance de la collectivité décrit à la sous-section précédente, l'individu moderne a acquis un espace de plus en plus grand pour la gouvernance de soi. Cet espace de gouvernance de soi n'est plus, comme auparavant, dicté entièrement par les déterminismes subséquents à la naissance en tel lieu, dans telle famille, avec tel bagage génétique. Mais il ne s'agit pas non plus, sauf dans quelques situations totalitaires, d'un espace soumis tout entier aux préceptes de la collectivité ou de la religion. Cet espace est fait d'une vaste zone d'indétermination qui, pour partie, explique précisément ce qui est parfois nommé comme « désenchantement du monde », de manière plus prosaïque comme « perte de sens » ou « de valeurs ». En fait, nous dirions que ni l'un ni l'autre ne sont à l'œuvre autant qu'un processus lent et hésitant de recomposition du social dans et par de nouvelles manières d'être des individus en relation.

Le rôle de la gouvernance

La gouvernance s'inscrit donc à la fois sur le registre de la gouvernance collective par l'État et de la gouvernance de soi. Si le véhicule privilégié de l'État est la loi formelle, l'adoption de lois n'épuise pas tout le champ de la gouvernance collective. Par ailleurs, la gouvernance de soi consiste en la lente découverte – au sens fort du terme – de la juridicité qui sous-tend l'action humaine.

Le professeur MacDonald présente la question qui nous est adressée de belle manière :

*« Comment le droit et les institutions juridiques peuvent-ils le mieux permettre d'atteindre la gouvernance symbolique de l'action humaine d'une manière qui facilite l'accomplissement juste des buts individuels et collectifs ? »*¹²

La question renvoie aux finalités de la gouvernance dans la collectivité : faciliter les rapports humains et la réalisation de soi, avec un minimum d'interférence de telle sorte à stimuler la découverte, en chacun de soi, de la source de la normativité plutôt que l'imposer de l'extérieur. Il n'est pas du ressort de la gouvernance par l'État d'assurer le bonheur ni la santé des citoyens. Il sera par contre de son devoir de s'assurer que les règles qu'il édicte et la manière de les concrétiser, nuiront le moins possible à la capacité de chacun de réaliser son être moral. Non plus donc une moralité unique, ou du moins une moralité pour tous, comme le soutenait la position dominante du rapport Le Dain, mais une facilitation de l'accès à la moralité pour les citoyens, moralité étant entendue ici au sens de cette découverte éthique des lois fondamentales dans le rapport à l'autre comme le soulignait le professeur Malherbe.

Le professeur MacDonald propose une définition de la gouvernance s'inspirant des travaux de la Commission de réforme du droit qui indique la voie : la gouvernance vise l'affranchissement et non le contrôle. De manière descriptive, il s'agit de définir les objectifs du vivre ensemble dans des politiques et des programmes d'action qui sont ensuite transmis par des systèmes et processus et soutenus par des acteurs permettant d'affirmer et de promouvoir l'action humaine. Véhicule privilégié de la gouvernance, la loi ne poursuit pas des finalités instrumentales de simple expressivité des règles ou prescriptions adoptées pour et au nom des citoyens mais est un processus de construction réciproque des relations sociales à travers lequel les uns et les autres, citoyens et gouvernements, procèdent à l'ajustement constant de leurs attentes de comportement.

Nous retenons donc comme principe directeur pour la gouvernance que **l'ensemble des dispositifs de l'État doit concourir à faciliter l'action humaine, et notamment les processus permettant de construire l'agencement entre le gouvernement collectif et le gouvernement de soi.**

LE DROIT PÉNAL OU LES LIMITES DE L'INTERDICTION

Nous aurons amplement l'occasion de décrire, au cours de ce rapport, à quel point le droit pénal est au cœur même de toute réflexion sur les drogues illicites. À tel

¹² MacDonald, *op. cit.*, page 78.

point que les débats autour de la législation criminelle, entre ce qu'il est convenu d'appeler les prohibitionnistes d'une part et les libéralistes d'autre part, en sont venus à primer outrageusement sur toutes sortes d'autres considérations. Le sociologue italien Pareto (1848-1923), cité par le professeur Pires dans son document de réflexion, disait des êtres humains que, même si nous aimons penser que nous sommes des êtres rationnels, nous sommes surtout des être raisonnants, c'est-à-dire que nous voulons « donner une apparence de logique à des conduites qui n'en ont pas la substance ». ¹³ Dans le contexte des débats sur le cannabis, cette expression prend ici toute son ampleur : les deux camps en effet se renvoyant constamment leurs raisonnements comme autant de « vérités » avérées.

Une réflexion sur le rôle et la place du droit pénal en matière de drogues illicites, ici de cannabis, pose en effet la question des fondements de l'opportunité de recourir au droit pénal. Généralement, les deux camps s'empressent au plus vite de sortir de ce strict champ de réflexion sur les fondements pour recourir à la justification. Et d'un côté comme de l'autre, la justification n'a plus rien à voir avec l'outil lui-même, le droit pénal, mais avec l'objet visé, le cannabis. En découle alors la litanie des « preuves » sur les effets du cannabis. Pour les uns, ces effets sont suffisamment importants pour « justifier » le recours au droit pénal ; et de citer alors les risques associés à l'usage du cannabis : dépendance, difficultés d'apprentissage, délinquance, conduites avec facultés affaiblies. Pour les autres, ces mêmes risques sont tellement minimes, ou alors couverts par d'autres règles pénales (la conduite sous influence), qu'ils ne justifient pas l'intervention pénale. Quoiqu'il en soit, le débat n'est déjà plus sur les fondements mais sur la justification.

Cette réflexion sur le rôle du droit pénal consiste précisément à nous ramener sur le terrain des fondements. La question centrale sera de tenter d'identifier des critères qui aideront à décider dans quelles circonstances la société peut – ou doit – recourir au droit pénal. Il s'agira alors de décider si ces critères fondent ou non une intervention du droit pénal pour la gestion des enjeux posés par le cannabis.

Nécessité de la distinction

Soulever la question de savoir si l'intervention du droit pénal en matière de cannabis est fondée, renvoie nécessairement à une observation première : le droit pénal n'est pas fondé d'intervenir pour tous les comportements mais, dans certains cas, il l'est nécessairement. Cette observation s'appuie sur trois constats : (1) la plupart des rapports sociaux se régulent autrement que par le pénal ; (2) certains comportements font nécessairement partie du champ pénal ; et (3) certains comportements que le droit pénal, à certaines époques, criminalisait, ont été depuis exclus de son domaine . Cette possibilité d'inclure ou d'exclure des actions humaines du champ du pénal repose sur la capacité de faire des distinctions.

¹³ Cité in Pires, A.P. (2002), *op. cit.*, page 8.

Mais une difficulté importante surgit dès qu'il s'agit d'admettre *dans les faits* – et non simplement en théorie – ce principe de la distinction. Une fois qu'un acte a été reconnu comme un « crime », il fait partie du fonds commun de ce qui définit tous les délits : des comportements contre la Société. Selon la logique interne du droit pénal la seule distinction admissible *précèderait* la décision d'incorporer ou non un comportement dans le droit pénal : s'il s'agit d'un comportement qui va contre le bien commun il s'agit d'un acte criminel, sinon, ce sera un acte incivil, peut-être même immoral, mais ce ne sera pas un acte criminel. Une fois cette décision prise, il n'y aurait plus que des distinctions de forme : type de procédure et sévérité des sanctions selon la nature du délit.

Tout se passe donc comme si, à l'intérieur du droit pénal, il n'y avait pas de distinction positive entre les délits, comme si la distinction ne se faisait qu'à l'extérieur, avant la constitution de l'acte en délit. Or, il existe des distinctions entre les types de délits. C'est la distinction que fait le professeur Pires entre les illicites standard et les illicites « à double face ». Il est plus courant de distinguer les crimes « sans victimes » des crimes « avec victimes », mais cette catégorisation est incorrecte. D'une part, pour le droit pénal, la victime c'est toute la Société. Il y a certes des victimes individuelles, mais en quelque sorte par extension, le tort étant en fait toujours celui infligé à l'ensemble de la société. C'est ce qui expliquerait par exemple le principe d'exemplarité, dans la théorie de la peine : en punissant un coupable on veut dissuader tous les autres qui pourraient être tentés d'agir de même.

D'autre part, cette catégorisation renvoie à un seul aspect, l'objet du délit, faisant perdre de vue les autres processus par lesquels le droit pénal distingue entre types de délits. Ainsi, un autre type de distinction intrinsèque au droit pénal relève du mode de justification. Décider de criminaliser l'homicide ne requiert pas, comme le souligne le professeur Pires, de mener des études comparatives pour décider si une forme de meurtre est moins nocive ou moins grave qu'une autre pour la victime. La composante cognitive est faible : ici, point besoin de recourir à des arguments externes pour justifier la pénalisation, l'acte en soi – c'est la notion de *malum in se* – suffit à établir la légitimité de la norme pénale. Rien de tel lorsqu'il est question des drogues : dès les débuts de la prohibition, il a été besoin de justifications externes relatives aux torts causés par l'usage de drogues et bien entendu à leur « démonstration », si faible fusse-t-elle. Ces objets de criminalisation ont une composante cognitive forte, en ceci donc qu'ils demandent une justification élevée.

La distinction entre les types d'illicites est donc un outil analytique nécessaire pour comprendre et réfléchir sur le rôle du droit pénal en matière de drogues. Ceci posé, quels sont les critères à partir desquels on peut exercer ces distinctions ? C'est l'objet de la sous-section suivante.

Critères de distinction

Le professeur Pires propose sept critères permettant de distinguer entre eux les divers types d'illicites en droit criminel.

Sept critères pour distinguer les délits	
Nature du délit	S'agit-il d'un conflit ou d'un échange ?
Discernement du droit	Le droit peut-il discerner une victime et la distinguer du déviant ?
Référentialité	L'auteur peut-il reconnaître les conséquences de ses actes sur autrui ?
Limitation de la liberté	La limitation de la liberté de l'auteur à poser l'acte se pose-t-elle ?
Justification du délit	Le droit doit-il recourir à des savoirs externes pour justifier la norme édictée ?
Application du droit	L'application requiert-elle une intervention proactive ?
Effets de la loi	Les effets de l'application peuvent-ils remettre la norme en cause ?

Nous les examinons brièvement un à un.

La nature du délit

Pour qu'il y ait délit il doit y avoir un tort causé, ce qui renvoie à une victime. Nous le disions plus tôt, au sens le plus large, le droit pénal considère que la société est la victime ultime de tout délit. La victime directe d'une agression ou d'un vol, est un témoin au sens technique du droit. Mais à un niveau concret, le droit reconnaît des victimes directes. Dans certains cas, la notion de victime tombe quelque part entre les deux : c'est le voisinage, l'entourage, comme par exemple dans le cas des nuisances occasionnées par la sollicitation publique aux fins de prostitution. Mais ces situations de nuisances sont elles-mêmes à la limite du droit pénal, dans une sorte de zone grise entre les délits standard et les délits à double face.

Ce qui est remarquable c'est que le droit pénal ne peut observer les délits institués à partir des trois niveaux en même temps. S'il voit la victime directe, alors c'est la société qui devient invisible. Et s'il considère le voisinage, il est encore plus évident qu'il ne peut ni voir une victime directe ni non plus la société dans son ensemble. Enfin, et surtout, s'il regarde du point de vue de la société dans son ensemble, alors il perd de vue non seulement la victime directe mais de surcroît il perd du coup sa spécificité. En effet, dans ce dernier cas, il est permis de dire que le droit civil aussi protège la société : sans le respect des contrats de vente et des dettes, c'est toute la société qui fout le camp.

Ce ne sont donc pas uniquement le tort causé, ni même la présence d'une victime, qui confèrent à des actes leur caractère pénal mais le fait qu'ils témoignent d'un conflit, d'un abus de pouvoir, de l'empiètement d'un acteur social sur l'autre. Évidemment, le droit civil sert aussi à résoudre des conflits ; d'où la nécessité d'autres critères.

Le discernement du droit

Le droit est-il capable de discerner clairement une victime d'un auteur ? Dans le cas des délits standard c'est généralement le cas : la victime d'un homicide se distingue clairement de l'auteur. Évidemment, il se présente des exceptions à ces cas de figure purs, comme lorsque la victime est accusée par le droit pénal (le cas d'une femme victime d'agression condamnée pour outrage parce qu'elle refuse de témoigner contre son agresseur).

Dans le cas des délits à double face, le droit pénal peine à trouver la distinction entre la victime et l'auteur. Ou alors, il trouve en l'auteur la victime qu'il veut alors protéger contre elle-même, créant du coup la victime du fait de sa propre intervention.

Alternativement, et par voie de conséquence parce que conscient des limites et difficultés de punir la victime (par exemple la prostituée), le droit pénal décolle du monde phénoménal (la nature concrète des faits) et change de mode de raisonnement. D'un mode de raisonnement analytique (les raisons qui permettent de savoir) il passe à un raisonnement conséquentialiste ou téléologique (les buts pour faire). Par exemple, le droit pénal justifiera alors son intervention par la nécessité de protéger les enfants. Ce faisant, il perd – et nous fait perdre – de vue les raisons – au demeurant inexplicables – qui l'ont amené en premier lieu à se saisir du délit.

Référentialité

Nous entendons ici par ce terme la capacité pour l'auteur du délit à reconnaître, même avec des «explications», dénégations, et autres mécanismes de neutralisation, le tort causé à autrui par l'acte posé. Même dans certains cas limites des illicites standard tel que la cruauté à animal domestique, l'auteur du délit – par exemple il a pendu le chien du voisin à un arbre – pourra reconnaître que son geste a causé du tort au propriétaire de l'animal. Dans le cas des illicites à double face, le geste posé peut être autodestructeur mais il ne recèle pas de méchanceté à autrui, voire il ne met même pas en relation avec autrui. C'est d'ailleurs l'une des interrogations que nous pose le sociologue A. Ehrenberg sur les drogues en regard du déficit de rapport à l'autre dont témoignent toutes les formes d'usage de drogues lorsqu'interprétées comme repli sur soi. Mais nous ne sommes déjà plus dans la sphère du droit pénal mais dans celle de la réflexion politique sur la démocratie.

Limitation de la liberté

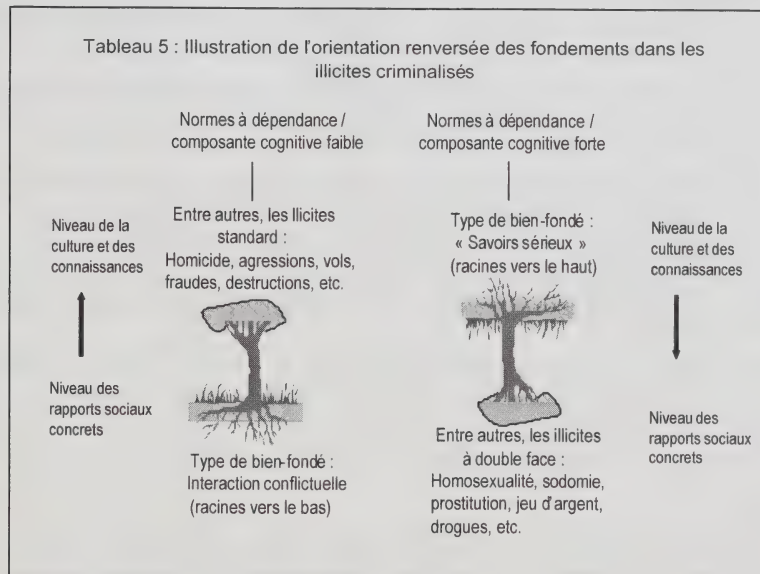
Nous en discuterons peu pour le moment puisque nous y reviendrons plus loin. Il suffira de dire que le droit institue de manière privilégiée des limites à la «liberté sauvage d'agir» comme le disait Kant : le droit pénal limite la liberté de prendre la vie ou la propriété de l'autre. Ce faisant il institue des droits-libertés c'est-à-dire le droit de jouir de sa vie et de sa propriété. La limitation par le droit des droits institués par lui, comme dans le cas de la prostitution où le droit intervient pour limiter le droit-liberté qu'il a institué de jouir de son propre corps et de sa liberté, lui pose donc des problèmes de fond.

Justification du délit

Le droit pénal n'a pas, ou très peu, à recourir à des justifications externes pour justifier la criminalisation des délits. C'est l'exemple de l'homicide que nous donnions d'entrée de jeu : le droit pénal n'a pas recours aux disciplines de la sociologie, de l'anthropologie, de l'histoire, de l'économie ou de la médecine, pour connaître les effets différents de divers types d'homicides, de diverses manières de tuer. Tel serait aussi le cas des agressions sexuelles, du vol, de la fraude, etc. La composante cognitive de justification est faible. Le bien-fondé de l'illicite standard trouve son socle au cœur même des rapports sociaux : c'est parce qu'on sait qu'une société qui songerait même à permettre l'homicide serait une société invivable, ne serait plus une société, que nous ne songeons même pas à interroger le bien-fondé de l'interdiction pénale de l'homicide. La seule question qui se pose encore dans certains pays mais que le Canada a depuis longtemps déjà résolue est celle de la peine que la société se réserve le droit d'imposer pour le meurtre.

C'est le contraire pour les illicites à double face, qui requièrent une démonstration empirique, une justification à composante cognitive forte. Cette question, les lecteurs s'en doutent bien, est centrale à tout le débat sur les drogues. Ceux qui voudront bien d'ailleurs nous accompagner dans la lecture de ce rapport constateront l'importance que nous y avons nous-même accordée.

Nous reproduisons ci-dessous le très ingénieux graphique le professeur Pires.



Comme le souligne le professeur Pires, le critère n'est pas ici de savoir s'il y a consensus ou *dissensus* sur la norme pénale, ces termes renvoyant à la manière et à la possibilité du débat démocratique. Le critère renvoie plutôt à la source de la légitimité de la norme : endogène ou exogène. Dans le cas des illicites standard, la source de légitimité est endogène. Dans le cas des illicites à double face, elle est exogène. Or, le processus de création de la loi pénale, lui, demeure le même : c'est le débat démocratique menant à l'adoption de la loi habilitante. C'est pourquoi il est facile de perdre de vue que les deux types de délits ne sont en fait pas de même nature.

« Le point important à retenir est que tous les illicites à double face auxquels ce critère s'applique présentent certains problèmes particuliers. (i) Ils ont un fondement endogène plus précaire, plus idéologique ou plus fragile parce qu'ils ne sont pas ancrés dans une déviance conflictuelle concrète et parce que les normes ne sont pas assez détachées de certaines formes de connaissance ou ne sont pas suffisamment indifférentes à la connaissance des faits. (ii) Ils sont alors plus sujets à un processus de sélection de la connaissance disponible et de la valeur affective de la connaissance que nous sélectionnons ou dont nous disposons à leur égard à un moment donné. Cela veut dire que l'examen critique et sérieux de la connaissance devient capital. (iii) Ils sont virtuellement plus polémiques et sujets à débat public à un moment donné et, aussi, susceptibles de se fonder sur des méprises culturelles ou cognitives majeures. »¹⁴

Application du droit

Dans la très grande majorité des cas impliquant des illicites standards, les délits sont amenés à l'attention de la police par une plainte : vols, agressions sexuelles, homicides, font le plus souvent l'objet de plaintes à la police. En fait, environ 90 % de tous les délits connus de la police proviennent de plaintes. Dans le cas des illicites à double face, on avoisine les 100 % de délits recherchés de manière proactive.

On objectera qu'en matière de production de cannabis, il y a eu augmentation des plaintes de la part des voisins des plantations en Colombie-Britannique. Mais si les voisins se plaignent, ce peut être à cause des dangers réels d'incendie – puisque l'illégalité force les producteurs à détourner les lignes électriques – ou à cause de l'incitation au silence de quelque malftrat – toujours en raison de l'illégalité dans laquelle se trouve le producteur.

L'application proactive du droit pénal dans le cas des illicites à double face entraîne des effets pervers, tant en coûts sociaux et humains, qu'en possibilités d'application discriminatoire ou en corruption policière, dont il faut se demander toujours s'ils se justifient par les fondements endogènes du délit.

Effets de la loi

Déoulant en quelque sorte du critère précédent mais aussi de tous les autres, celui-ci renvoie à la légitimité de la norme. Les difficultés et critiques que soulèvera la

¹⁴ Pires, A.P., (2002) *op. cit.*, page 59.

proactivité policière, les changements dans la normativité sociale ou dans les bases de connaissances, font en sorte que la loi devient contre-productive, suscitant *sui generis* l'interrogation de ses fondements et de sa légitimité.

Nous regroupons les critères proposés par le professeur Pires en trois couples, chacun ayant un côté «acte» et un côté «droit» à partir desquelles il est possible de saisir la distinction entre les délits de nature pénale.

Le premier couple concerne **la nature du délit**. Côté acte, la question porte sur la relation entre la «victime» et l'«auteur»: s'ils sont en situation de conflit ou en situation d'échange. Lorsqu'on renverse la pièce, la question est de savoir si le droit pénal peut ou non distinguer entre une victime et un auteur.

Le second concerne **la justification**. Côté acte il s'agit de savoir si l'auteur peut reconnaître ses torts à autrui. Côté droit, il s'agit de saisir l'origine de la légitimité de la norme.

Enfin, le troisième concerne **l'opérativité**. Côté acte, la question est de savoir si l'application de la norme instituée provient des victimes – ou témoins – ou si elle requiert une proactivité des agences d'application. Côté droit, il s'agit de savoir si la mise en application de la norme retourne ou risque de se retourner contre elle-même.

Selon nous, l'analyse des délits institués dans le Code criminel à partir de ces trois couples permet de répondre à l'interrogation fondamentale : la limitation de la liberté d'une personne à poser un acte se justifie-t-elle en droit pénal ? C'est pourquoi nous n'en faisons pas tant un critère que le résultat de l'application de ces critères à la norme instituée par le droit pénal.

Application aux drogues illicites

Les lois pénales sur les drogues illicites sont-elles un illicite à double face ? Sans doute.

Le délit créé implique un échange et il importe peu que l'objet de la transaction soit un objet prohibé ou non: l'échange entre les deux parties est un échange consentant. Lorsqu'il s'agit de l'usage de cannabis – ou à cet égard d'opium ou de coca qui par hasard pousseraient dans mon jardin – et que je décide de consommer, il n'y a même pas situation d'échange avec un autre. Pourtant, la possession au Canada, l'usage dans certains pays, sont prohibés.

Le droit pénal peine à trouver une victime. S'agissant de la conduite avec facultés affaiblies qui met en danger la vie d'autrui, il existe déjà une disposition du Code criminel punissant la conduite d'un véhicule sous l'influence de toute substance. Les difficultés d'application en matière de cannabis ne sont pas un argument. Elles se retrouvent tout aussi bien pour la conduite sous l'influence de médicaments d'ordonnance. Les enfants ? On voit mal comment le fait de consommer du cannabis nuit aux enfants, sauf si un marché sauvage, soit par absence de réglementation soit par la criminalisation actuelle qui alimente les marchés illégaux, cause du tort aux enfants.

En ce qui concerne la réfentialité, l'auteur de consommation, et même le revendeur entre adultes consentants, ne se voient pas comme causant du tort à autrui. C'est vrai en tout cas pour les dérivés du cannabis. Évidemment, le coupage de l'herbe avec d'autres produits, le fait que des produits frelatés puissent être vendus, rappellent le temps de la prohibition de l'alcool – et c'est bien l'une des raisons pour lesquelles on a mis fin à ce système. D'autre part, pour justifier le délit, le droit pénal est obligé d'avoir recours aux savoirs externes sur lesquels il n'a pas de contrôle – ni non plus que sur leur interprétation – pour justifier la norme de comportement.

Enfin, l'opérativité de la norme suscite à la fois des problèmes d'application et une interrogation constante de la légitimité même de la norme.

En somme, les fondements de la norme pénale sont faibles lorsque la norme instituée (1) ne concerne pas une relation à autrui dont les caractéristiques sont telles que non seulement elle ne crée pas de victime mais qu'il n'y a pas d'auteur qui puisse se reconnaître comme tel ; (2) doit donc se justifier à l'extérieur des rapports sociaux fondamentaux dans la culture ; et (3) entraîne une application dont les effets pervers se retournent contre elle pour interroger sa légitimité. Lorsque le droit pénal intervient en ces matières, il fait de l'auteur la victime par le simple fait de la norme qu'il a instituée et qu'il tentera ensuite de sauver par la protection de l'auteur contre lui-même ce qu'il ne peut faire qu'au prix d'une fuite sans fin dans la production d'une connaissance qui lui échappe constamment.

Nous retenons de cette analyse que **le droit pénal ne doit intervenir que lorsque l'action visée implique un danger significatif et direct à autrui.**

LA SCIENCE OU LA CONNAISSANCE APPROCHÉE

« La population est généralement disposée à accepter que le choix des méthodes de contrôle soit déterminé par l'interaction entre des spécialistes du secteur de la santé et des organismes gouvernementaux, car on reconnaît que le médicament est utilisé essentiellement pour assurer son bien-être et on se fie aux spécialistes en la matière pour décider de la meilleure façon de protéger la population.

(...)

C'est donc dire que pour formuler une politique sociale sur leur usage non médical, vous devez tenir compte non seulement des préjudices causés par la loi ou par la drogue, mais autant que possible de l'analyse intégrale des avantages et des coûts de la consommation de drogues et des mesures antidrogues et de toute modification à ces mesures que vous pourrez envisager. C'est à la société tout entière de décider, et non aux experts en fonction des connaissances scientifiques. »¹⁵

¹⁵ Dr. Harold Kalant, professeur à l'Université de Toronto, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, fascicule no 4, pages 69 et 78.

Depuis le tout début de nos travaux, nous étions conscients que la connaissance, même à prétention scientifique, ne suffirait pas à élaborer une politique publique sur les drogues illicites, sur le cannabis en particulier. On pourrait penser qu'un Comité spécial d'étude sur les drogues illicites, le cannabis dans ce cas-ci, ne devrait fonder ses conclusions et recommandations que sur le savoir. Pourtant, nul savoir ne peut jamais à lui seul définir une politique publique. À cela, nous invoquons plusieurs raisons.

(1) Premièrement, le savoir, ou plus correctement les savoirs, sont condamnés à être une œuvre ouverte, jamais définitive. Le processus de connaissance est par définition une interrogation constante sur le champ de l'inconnu, l'humble reconnaissance de l'immensité de la tâche en même temps que de son caractère approximatif – un bricolage aurait dit l'anthropologue français Claude Lévi-Strauss – ainsi que la reconnaissance de la complexité. Reconnaissance encore de l'ignorance où nous demeurons devant les questions fondamentales, questions toujours ouvertes par définition. Citons le professeur de Koninck :

« Il convient, en un mot, rappelions-nous, de célébrer l'ignorance où nous voilà enfin parvenus – car elle fait partie maintenant de l'ignorance connue (la simple ignorance dans le vocabulaire classique), par opposition à l'ignorance ignorée (la double ignorance – grâce aux neurosciences, à l'océanographie, à l'astrophysique, mais aussi grâce à la psychologie des profondeurs, à l'histoire des religions (pour ne citer que deux des « sciences humaines » avancées) et à tant d'autres disciplines qui ont spécialement progressé à notre époque. La célébrer par l'émerveillement et la perplexité qui sont toujours le sine qua non de toute découverte. »¹⁶

Situation en apparence paradoxale puisque jamais tant d'informations n'ont été produites – dans tous les domaines de la culture humaine mais aussi spécifiquement en matière de drogues – qu'à l'époque contemporaine. À telle enseigne d'ailleurs que les spécialistes de toute sphère – économistes, sociologues, criminologues, psychologues, et autres généticiens – sont devenus les personnages incontournables du grand jeu de la justification des décisions des politiques publiques. Si on agit sur la qualité de l'environnement, si par exemple on reconnaît la réalité des phénomènes de réchauffement climatique et d'effet de serre, ce sera parce qu'une commission scientifique en aura persuadé les décideurs. Si on prend telle décision macroéconomique, elle sera expliquée au bulletin de nouvelles par un économiste patenté. Et que se produisent des violences urbaines ou l'hécatombe d'un tueur en série, on entendra psychologues et criminologues expliquer l'événement, voire justifier une orientation de politique pénale. Production massive d'information et circulation des experts dans l'arène politique habillent alors les processus de décision publique d'un manteau de crédibilité, sinon de légitimité. Le citoyen, désarmé voire désabusé par ce qu'il perçoit d'écart entre le monde vécu et le monde représenté dans les moyens de distribution – toujours inégale – de la culture, se sentira d'autant moins autorisé à

¹⁶ De Koninck, T., (2002) *op. cit.*, page 25.

questionner la décision politique qu'elle sera justement investie du pouvoir de la « connaissance ». L'information devient connaissance, le savant un expert, et le politique, de moins en moins capable de réflexion sur des principes et des fondements, et surtout de réflexion autonome, se satisfait de cette armée commode « d'experts » toujours disposés à se faire conseillers.

Mais l'information n'est pas la connaissance. Et la connaissance ne se réduit pas à de l'information. La toile Internet déborde certes d'informations, mais personne n'osera dire que tout ce qui y circule mérite le qualificatif de connaissance.

(2) Deuxièmement, la production de la connaissance est fragmentée, à l'image de la vie moderne elle-même, refusant de poser la question du sens. L'assemblage bout à bout des disciplines universitaires n'est pas plus à même de produire de la connaissance, chacune posant ses questions à partir de son propre domaine d'expertise, ne regardant qu'à partir de sa lorgnette, qu'une seule de ces disciplines isolément. Les appels à l'interdisciplinarité et à la transdisciplinarité sonnent aussi creux que les incantations au « partenariat » dans le champ du social, alors que demeure absente une véritable volonté de compréhension, une tentative au moins de reconstitution du sens. Tout se passe comme si, dans le champ des drogues, un institut aussi prestigieux que le NIDA, gérant des budgets de recherche proprement astronomiques, menant des études qui, en soi, peuvent être fascinantes voire utiles, tout se passe comme si donc, cet institut n'avait pour objectif que de démonter, pièce après pièce, les mécanismes bio-psychologiques de la « toxicomanie », pour démontrer que l'usage de ce que l'institut appelle des drogues d'abus mène à des abus qui sont dangereux.

Or, le sens d'une pratique ne se réduit pas à sa décomposition en diverses parties, ni non plus qu'en un ramassis de ses recompositions. La connaissance remarquable des mécanismes cellulaires et de la génétique ne nous donne pas à la biologie plus de réponses aux questions éthiques et politiques que pose le clonage. Pas plus que la connaissance des mécanismes de l'atome et de la fission nucléaire n'avait fourni de réponses à la fabrication et à l'utilisation des armes nucléaires. Et la « science » économique, hautement abstraite et imprégnée de mathématiques, est à ce point détachée de la réalité qu'elle n'est plus capable d'expliquer le clivage entre les nations ni celui entre richesse extravagante d'un côté et misère humaine de l'autre.

Féru de jeux mathématiques et d'abstractions, les chercheurs semblent de moins en moins capables de poser les questions fondamentales. Leurs champs de connaissance sont parcellaires, découpés en autant de seigneuries que l'étaient les terres à l'époque de la colonisation, et tout autant ils peuvent donner l'impression du progrès du savoir, tout autant ils confondent connaissance et technique, savoir et expertise. Reposer les questions fondamentales, c'est être capable de faire des liens entre les domaines, c'est restaurer la complexité au nom de la nécessaire production du sens. On est loin d'ailleurs d'avoir résolu les débats entre scientifiques et philosophes sur

l'unification possible du discours et les débats sur la voie d'une connaissance intégrée de l'humain demeurent ouverts.¹⁷

(3) Se pose ensuite le problème des « experts », ces « idiots savants ».

« Idiots est le mot juste (du latin idiota, «ignorant», emprunté au grec idiôtês, «ignorant», par opposition à pepaideumenos, «homme cultivé»). Le malheur est que leur réputation imméritée d'experts étend d'autant plus l'influence de cette idiotie en des sociétés comme les nôtres où la «science» exerce un pouvoir magique et où «le pouvoir semble de plus en plus légitimé par des experts «savants», comme le relève Jacques Testart : «En effet, l'expert rassure et les citoyens hésitent à affirmer l'absurdité ou le cynisme d'une décision politique ayant reçu l'aval des «experts les plus qualifiés». »¹⁸

Il ne s'agit pas d'accuser la science mais de récuser la difficulté de penser. C'est une chose de mener des études pointues, sur des questions précises, c'est une autre chose de prétendre «expliquer», à partir de ce savoir fragmentaire, et encore plus de fournir des réponses que, de toutes façons, la science ne peut fournir. On peut, en effet, mener des études sur le comportement des rats de laboratoire suite à l'injection d'une dose de Δ^9 -THC (le principal composant actif du cannabis), c'est autre chose de prétendre que ce type d'expérimentation révèle quoi que ce soit d'utile pour comprendre l'usage de cannabis et ses effets chez les humains. Moins encore pour fournir une réponse aux questions de politique publique sur le cannabis.

Geste social, comportement inscrit dans une histoire, l'usage de drogues ne se réduit pas à des mécanismes neuropsychologiques. Il peut être utile de connaître les mécanismes en jeu ; cette connaissance ne sera par contre pas suffisante pour expliquer le sens de l'expérience de la drogue dans nos sociétés.

(4) À la colonisation de l'esprit par le pouvoir de l'expert – qui se place en médiateur entre le politique et la collectivité – correspond une dangereuse colonisation de la réflexion des sciences de l'humain par l'attrait qu'exercent les sciences naturelles. Il n'y a là rien de neuf, ce mouvement avait commencé en fait dès le XIXe siècle, mais il s'est gravement amplifié au cours du XXe et notamment par le rapprochement toujours plus étroit entre la psychologie et les neurosciences. Il en résulte une transposition des méthodes et des manières de poser les problèmes par laquelle les sciences de l'humain s'imposent un réductionnisme (isoler des facteurs de leur contexte) quantitativiste (mettant l'accent sur la mesure mathématique). D'où une crise de connaissance. Quand on prendra un échantillon de 100 jeunes choisis aléatoirement dans la population, et qu'on les exposera à une batterie de tests psychologiques pour savoir

¹⁷ Nous renvoyons là-dessus au très beau dialogue entre un philosophe et un neurobiologiste : Changeux, J.P. et P. Ricoeur (1998) *Ce qui nous fait penser. La nature et la règle*. Paris : Odile Jacob, entre autres les pages 77-78

¹⁸ De Koninck, T. (2002) *op. cit.*, page 6.

pourquoi ils consomment du cannabis, on aura de l'anecdote à saveur sérieuse et une série de corrélations peu susceptibles de nous révéler les sens de l'usage de drogue.

Il fait bon ton dans certains milieux académiques et centres de décision de parler de politiques qui soient « *evidence-based* ». On entend par là des politiques basées sur la preuve « scientifique » de ce qui marche. L'un des exemples les plus puissants était la Stratégie de réduction de la criminalité adoptée en 1998 par le gouvernement travailliste nouvellement élu en Angleterre. Avec des sommes considérables destinées à soutenir des projets de prévention dont des études avaient démontré l'efficacité, cette stratégie devait réduire divers types de crimes de tant de point de pourcentage sur cinq ans.¹⁹ Nous sommes en 2002 et l'Angleterre traverse présentement une « crise » sur l'insécurité publique en partie parce que les niveaux de criminalité ont en fait augmenté, et la stratégie de réduction de la criminalité est en plein désarroi.

Il serait tentant de se demander : mais comment pouvait-il en être autrement ? Les stratégies d'ingénierie sociale datent du XIX^e siècle, et ont rarement donné des résultats concrets, qu'il s'agisse du contrôle des populations ou de la criminalité. Fondées sur quelques « recettes » elles-mêmes tirées de quelques expérimentations contrôlées, elles « oublient » la complexité du monde contemporain plus que jamais fait d'interdépendances et de foyers multiples de relations, plus que jamais fluide et insaisissable, et qui n'a de cesse de nous renvoyer à la complexité. Est-ce pour la fuir qu'on se réfugie alors dans l'abstraction mathématique des corrélations entre variables prétendument prédictives ?

Nos travaux ont fait la part belle aux connaissances issues de la recherche ; la seconde partie de notre rapport en témoigne abondamment. Nous avons tenté, ce faisant, de faire justice à la connaissance élaborée au cours des dernières décennies. Nous ne voulions, ni d'ailleurs ne pouvions en faire l'économie. Nous recommanderons aussi que se poursuive l'effort de connaissance sur certaines questions que nous avons jugées importantes.

Pour autant, nous n'avons pas la prétention d'avoir répondu à la question fondamentale, pourquoi les gens consomment-ils des substances psychoactives, alcool, drogues ou médicaments. Nous avons d'ailleurs été étonnés, considérant la quantité d'études menées chaque année sur les drogues, de constater qu'il s'agit d'un domaine où la recherche fait défaut. Comme si la recherche de réponses à des questions techniques avait fait perdre de vue cette question au fond si basique !

La connaissance scientifique ne remplace ni la réflexion ni non plus que la décision politique. Elle est une aide à la décision. Et c'est de cette manière que nous la pensons la plus à même de contribuer à la politique publique sur les drogues. C'est en tout cas notre principe directeur : **la connaissance scientifique, qui doit continuer d'explorer des questions pointues sur des enjeux clés, tout en poursuivant la nécessaire réflexion sur les questions globales, est une aide à la décision de politique publique.** Ni plus, mais ni moins.

¹⁹ Le chapitre 20 en parle plus en détail puisque cette stratégie incluait un volet drogue.

CONCLUSIONS

L'un des grands défis que nous posent les sociétés modernes est d'inventer ensemble des lieux et des modes de socialité au delà des anciens réflexes de gestion de l'espace public par la volonté législative exprimée par la loi formelle. Devenus sujets de droits, objectifs et subjectifs, les citoyens participent de plein droit à la définition, nous dirions même à la conquête, du projet collectif du vivre ensemble. Il ne suffit donc plus d'édicter des lois qui, parce qu'édictées par le Parlement suivant les règles, devraient recevoir l'assentiment immédiat. Il faut concevoir des formes de participation éthique, par des échanges communicationnels, aux modes de définition du gouvernement collectif et du gouvernement de soi. Qu'on soit ou non d'accord avec les modes d'expression qu'ils prennent ou même avec le contenu, c'est bien ce que demandent les mouvements de la société civile qui s'opposent à la mondialisation décidée en conclave ou qui appellent à privilégier un développement durable et équitable : comment définir, ensemble, une normativité partagée où le gouvernement collectif et le gouvernement de soi peuvent se nourrir, se faciliter, mutuellement.

Nous retenons de cette excursion en terrain réflexif **qu'une politique publique sur les drogues illicites, sur le cannabis dans le cas qui nous occupe, repose sur une éthique de l'autonomie réciproque, soutenue par une volonté de favoriser l'action humaine, ne faisant intervenir le droit pénal que lorsque l'action visée implique un danger significatif et direct à autrui, et invitant l'élaboration de connaissances susceptibles de guider et de favoriser la réflexion et l'action.**

CHAPITRE 4

UN CONTEXTE EN MOUVANCE

Nos travaux s'inscrivent dans l'histoire, dans *une* période historique donnée. Cette histoire n'est pas simplement un champ externe à nous, quelque chose qui serait là, dehors, et n'aurait pas d'influence sur ce que nous faisons. Elle est étroitement entremêlée avec nos actions, les influençant de diverses manières subtiles. En même temps, parce que nous sommes en train de vivre cette histoire et de la faire, nous n'avons pas la distance nécessaire pour en reconnaître tous les éléments, ni non plus pour en comprendre toutes les implications. Néanmoins, pour resituer nos travaux dans leur complexité et dans l'incertain, nous avons la responsabilité de tenter de cerner certains éléments de cette histoire en-train-de-se-faire. Ce court chapitre tente d'identifier certains éléments qui nous paraissent pertinents. Nous en identifions six que nous distinguons sur deux plans, reconnaissant que ces niveaux sont en interaction nécessaire. Au plan international, la globalisation des marchés et les mouvements d'intégration économique, voire politique ; la montée en puissance du discours sécuritaire et l'équation drogues = criminalité ; et les éléments de changement qui se dessinent dans certains pays en matière de politiques sur les drogues. Au plan national : l'activisme judiciaire qui se traduit en décisions significatives au moins sur le registre de l'usage thérapeutique du cannabis ; l'adoption de la Stratégie nationale sur la sécurité des collectivités et la prévention du crime ; et la lutte au crime organisé.

MUTATIONS DU CONTEXTE INTERNATIONAL

Les deux dernières décennies ont vu se produire des mutations importantes tant dans l'ordre international que dans la structure des États nationaux. Il ne s'agit pas d'en faire l'historique ni même une analyse ; nous n'avons pas cette prétention. Cependant, quelques-unes de ces mutations ont une incidence certaine sur les drogues.

Globalisation et intégration

Depuis le début des années 1980, avec la déréglementation des marchés, on assiste à une globalisation des échanges économiques et à une intégration continentale

plus importante. La fin de la guerre froide et la disparition du bloc soviétique, de même que l'ouverture de la Chine aux marchés capitalistes, n'ont fait qu'accroître le rythme de ces mouvements. On en a vu pour résultat notamment la plus grande intégration de l'espace économique européen consacrée dans les accords de Maastricht ainsi que dans l'Accord de libre échange nord-américain entre le Canada, les États-Unis et le Mexique.

Au même moment, les changements technologiques rapides, notamment par l'Internet et la communication par satellite, ont contribué à ouvrir encore davantage, quoique de manière et à des rythmes différents selon le niveau de développement des pays, les frontières de la circulation des biens, des services et des capitaux. De même, l'accroissement des flux de populations et des voyages a mené, parfois par défaut voire contre la volonté de certains États, à une plus libre circulation des personnes.

Ces mutations ont eu des impacts importants sur les marchés des drogues illicites. L'ouverture des marchés et des frontières a bien sûr créé de nouvelles opportunités pour le blanchiment d'argent, tout en augmentant les difficultés de contrôles aux frontières et dans les transports. On oublie trop souvent cependant certains effets des politiques macroéconomiques régissant les flux mondiaux des capitaux et des ajustements structurels qui sont attendus, notamment des pays en développement. Une étude produite pour le Programme des Nations Unies sur le contrôle des drogues le démontre bien.

[Traduction] « *Les efforts pour atteindre la stabilité (de la balance des paiements) visent souvent à réduire le déficit extérieur en réduisant les niveaux de consommation intérieure. Les politiques de stabilisation macroéconomique obligent souvent les gouvernements et / ou le secteur privé à diminuer leurs dépenses.*

Lorsque la croissance monétaire diminue, une infusion de monnaie forte peut gonfler la réserve monétaire d'un pays, réduisant ainsi les difficultés associées aux politiques fiscales et le niveau d'endettement. L'argent de la drogue peut alors devenir un outil de stabilisation, une source de capital sans conditions attachées. Les pays qui servent de réservoirs aux revenus tirés du trafic international de drogues peuvent donc en retirer des bénéfices importants. »¹

De plus, la tendance à la privatisation de secteurs entiers de l'économie nationale, notamment dans les pays d'Europe de l'Est après la chute du Mur de Berlin, mais aussi dans plusieurs pays d'Amérique latine et d'Asie, dans un environnement où les mesures de régulation interne et la disponibilité du crédit sont faibles, favorise les capitaux du crime organisé, notamment en provenance du blanchiment de l'argent de la drogue. On constate d'ailleurs que la concentration de la production industrielle dans ces pays n'a pas nécessairement diminué après la privatisation, favorisant en retour la pénétration du crime organisé.²

¹ Keh, D.I. (1996) *Drug Money in a Changing World. Economic Reform and Criminal Finance*. Vienna : UNDCP, technical paper no 4.

² *Ibid.*, pages 11-13.

On oublie aussi trop souvent le rôle des investisseurs des pays développés d'où proviennent les poussées à la déréglementation et à la libéralisation des marchés. Dans ces pays, comme le note Campodónico « *(r)ares sont les poursuites contre les grands trafiquants de drogues ou les institutions financières du monde industrialisé, là où pourtant la plupart des bénéfices du trafic de drogues sont engrangés.* »³ Il en résulte un double discours, où les nécessités de la libéralisation des capitaux pour les multinationales rendent impossible de distinguer entre les capitaux propres et les sales. Le cas de figure du Pérou que développe Campodónico comme celui de la Russie qu'examine Keh, offrent des ressemblances structurelles frappantes.

La fin de la guerre froide a aussi signifié que les pays alliés au bloc soviétique, ou les groupes internes de guérillas, ont dû se tourner vers d'autres sources de financement. C'est l'analyse de l'Observatoire géopolitique des drogues et de son fondateur Alain Labrousse, qui comparaisait devant le Comité le 28 mai 2001, mentionnant à titre d'exemple le cas du Kosovo :

*« À cet égard l'affaire du Kosovo est exemplaire. La création de l'UCK a été financée par un intense trafic d'héroïne provenant d'Istanbul et vendant l'héroïne en Suisse pour acheter des kalachnikov et des armes de poing, qui ensuite étaient en vente pratiquement libre et étaient stockées dans la région albanaise de Macédoine. »*⁴

Et comme pour faire le lien avec les effets pervers de la libéralisation et la mise en cause de la macroéconomie, M. Labrousse écrivait dans un livre précédent

*« Selon les estimations, le trafic des drogues dans le monde génère entre 420 et 577 milliards de francs de chiffre d'affaires annuel. Le rôle grandissant que jouent ces fonds dans les processus de démocratisation et de restructuration économique conduit à une explosion des cultures et des trafics en Asie, en Afrique et à l'Est. C'est cette manne, dans laquelle puisent les pouvoirs locaux de toutes sortes, qui alimente les conflits nationalistes, ethniques ou religieux du tiers monde et des pays de l'ancien bloc communiste. Les drogues, enjeu économique, outil de pouvoir, sont dorénavant une donnée des relations internationales. Au-delà de quelques gros trafiquants, les systèmes bancaires des pays riches, le FMI, les grands organismes internationaux sont mis en cause. »*⁵

Rejoignant d'autres analystes, M Labrousse observe que les pays développés ne sont pas à l'abri des critiques puisqu'ils « ferment les yeux » lorsque leurs intérêts, notamment stratégiques et économiques sont en cause.

³ Campodónico, H. (1996) « Drug trafficking, laundering and neo-liberal economics : Perverse effects for a developing country. » in Dorn, N. et alii (eds) *European Drug Policies and Enforcement*. London : Macmillan Press, page 231.

⁴ Sénat du Canada (2001) Délibérations du Comité spécial sur les drogues illicites, Ottawa : Sénat du Canada, première session de la trente-septième législature, fascicule 3, page 27. On consultera aussi en ligne les rapports de l'OGD à l'adresse : www.ogd.fr

⁵ Labrousse, A. et A. Wallon (1993) *La Planète des drogues : organisations criminelles, guerres et blanchiment*. Paris : Seuil.

« Un incident s'est produit et a été reproduit par la presse quand le groupe d'action financière internationale a dressé la liste des pays suspects de se livrer au blanchiment d'argent, on n'a trouvé ni l'île anglo-normande de Jersey ni la principauté de Monaco, ce qui a étonné tout le monde. On a appris par la suite qu'il y a eu une négociation entre la France et l'Angleterre pour que chacun évite de mettre son pays sur la liste relativement infamante. »⁶

C'est aussi le cas des intérêts européens au Maroc et en Afrique plus généralement, ainsi qu'américains, envers les paradis fiscaux.

De son côté, le rapport 2001 de l'Organe international de contrôle des stupéfiants (OICS), organisme des Nations Unies chargé de surveiller l'application des traités internationaux relatifs au contrôle des drogues consacre son premier chapitre aux effets de la mondialisation et des nouvelles technologies. Il observe qu'à côté de leurs « innombrables avantages » la mondialisation et les nouvelles technologies ont entraîné des effets pervers : atteintes aux identités culturelles, atomisation politique et sociale, marginalisation et pauvreté grandissante dans certains secteurs. Selon l'Organe, « les revendeurs et trafiquants de drogues exploitent ces disparités pour tenter de développer de nouveaux marchés. En outre, au cours des 10 dernières années, l'expansion de l'activité commerciale et financière a permis aux délinquants de mieux dissimuler les transferts illicites de marchandises comme les drogues et les précurseurs placés sous contrôle international, et les profits qu'ils en tirent. »⁷ Selon le rapport, les nouvelles technologies sont utilisées par les trafiquants de drogues de deux façons différentes : pour améliorer l'efficacité de la livraison et de la distribution des produits, pour se protéger et protéger leurs activités illicites, pour commettre des délits classiques selon de nouvelles méthodes ou commettre de nouveaux types de délits.⁸ Le rapport note entre autres ce qui suit :

- La Commission interaméricaine de contrôle de l'abus des drogues notait pour 1999-2000 qu'Internet était devenu le moyen le plus utilisé pour développer la production de drogues synthétiques dans certains pays de la région ;
- L'organisation internationale de police criminelle (Interpol) notait en 2000 que plus de 1 000 sites Web proposaient la vente de drogues illicites, principalement du cannabis ;
- Le recours accru aux virements électroniques ainsi que l'augmentation considérable du volume et de la rapidité des flux monétaires réduisent la possibilité de détecter les mouvements de capitaux illicites ; et
- Le Groupe d'action financière sur le blanchiment de capitaux (GAFI) a attiré l'attention sur le fait qu'Internet pouvait aggraver certains risques

⁶ Labrousse, A., *op. cit.*, pages 28-29.

⁷ Organe international de contrôle des stupéfiants, *Rapport pour 2001*. Vienne : Organisation des Nations Unies, page 1.

⁸ *Ibid.*, page 2.

classiques de blanchiment d'argent : facilité d'accès, dépersonnalisation des contacts, et rapidité des transactions.⁹

Bref, si la recherche d'une plus grande cohérence, voire d'une meilleure prévisibilité des marchés internationaux, porte de grandes promesses, notamment pour les pays en développement, elle comporte aussi, indépendamment de toutes autres considérations de géopolitique, des effets pervers. De surcroît, ces qualités ne sont pas sans présenter des avantages aussi... pour les groupes de criminalité organisée.

Errances d'un discours sécuritaire

Au cours de cette même période, on a vu s'installer peu à peu, dans divers pays du monde occidental, un discours sur la sécurité intérieure en réponse à la hausse perçue ou réelle de la criminalité et du sentiment d'insécurité des populations. On a pu en voir des effets aussi bien dans des campagnes électorales axées sur la loi et l'ordre que dans une dérive vers des mesures jugées répressives par d'aucuns, telles les politiques de tolérance zéro.¹⁰

En matière de drogues, ce discours se décline sous deux volets principaux. D'abord, à compter du début des années 1980 sous la présidence de Ronald Reagan aux États-Unis, un discours de « guerre à la drogue » qui dépassera largement les frontières américaines. Ensuite, à compter de la fin des années 1980, une équivalence de plus en plus forte entre drogues et criminalité.

Le discours de la guerre à la drogue a permis de consacrer des ressources sans précédent à la lutte antidrogues. Souvenons-nous que c'est à cette époque que le Canada a lancé la première phase de sa stratégie antidrogues avec un budget de 210 millions \$ sur cinq ans. Aux États-Unis, la « guerre à la drogue » a signifié concrètement la multiplication par 17 des dépenses fédérales consacrées à la lutte antidrogues : elles sont passées de 100 millions \$ au début des années 1970 à plus de 18 milliards \$ pour le seul gouvernement fédéral en 2002. Les dépenses combinées du fédéral et des États pour la guerre à la drogue sont estimées à plus de 40 milliards \$ en 2000.¹¹ De même, cette guerre a signifié le quadruplement de la population carcérale américaine, passant de 500 000 détenus au début des années 80 à plus de 2 millions à la fin des années 90.

[Traduction] « *Au cours des années 1990, les dépenses du système correctionnel ont été l'un des secteurs de croissance les plus rapides dans les budgets des états. Ce poste budgétaire représentait en moyenne 7 % des dépenses des états en 2000. Il en coûte actuellement près de 40 milliards aux comtés, états et gouvernement fédéral pour emprisonner près de deux millions de personnes, comparativement à*

⁹ *Ibid.*, pages 2-4.

¹⁰ Là-dessus, voir par exemple les travaux de Wacquant, L., (2000) *Les prisons de la misère*. Paris.

¹¹ McNamara, J.D., (2000) « Commentary : Criminalization of Drug Use. » *Psychiatric Times*, vol XVII, no 9.

5 milliards en 1978. De ce montant, vingt-quatre milliards sont dépensés pour incarcérer des délinquants non violents. Malgré la diminution modeste de la population carcérale dans les états récemment, l'augmentation massive du nombre de détenus au cours des deux dernières décennies signifie que sur chaque quatorze dollars des fonds généraux des états un dollar a été dépensé pour le système correctionnel en 2000. (...) L'expansion des prisons américaines est largement due à l'incarcération de contrevenants non violents. Le pourcentage des contrevenants violents détenus dans les prisons des états est passé de 57 % en 1978 à 48 % en 1999. Entre 1980 et 1997, le nombre de contrevenants violents détenus dans les prisons des états a presque doublé (augmentant de 82 %) tandis que le nombre de contrevenants non violents a triplé (augmentant de 207 %) ; le nombre de contrevenants incarcérés pour infractions reliés aux drogues a été multiplié par 11 (augmentant de 1 040 %). »¹²

Au Canada, comme nous le verrons au chapitre 15, alors que la criminalité globale diminue régulièrement depuis près de dix ans maintenant, la proportion d'arrestations pour infractions aux drogues n'a cessé d'augmenter et la population carcérale globale n'a pas diminué. Il est même permis de croire que la proportion des détenus présentant des problèmes reliés aux toxicomanies a en fait augmenté.

Ce discours s'est accompagné de toute une panoplie de mesures aux plans national et international, notamment l'augmentation dans divers pays des pouvoirs policiers en matière de lutte contre les drogues, le renforcement de l'infrastructure internationale des polices, l'utilisation de la lutte à la drogue dans la diplomatie internationale, et sa traduction dans les instances de l'ONU, notamment lors de la session extraordinaire des Nations Unies sur les drogues en 1998.

L'autre volet du discours porte sur l'équation drogue et criminalité. Pour une proportion importante des citoyens, l'usage des drogues est associé à la délinquance, quand il n'en est pas une cause. Témoins, ces quelques citations :

[Traduction] « Nous ne pouvons plus continuer de mettre en œuvre des politiques et des programmes qui ne s'adressent pas aux racines de l'abus de substances et à la criminalité qui en découle. »¹³

« Dans les pays qui ont adopté des politiques laxistes envers la consommation, les crimes violents et les activités criminelles organisées ont augmenté en proportion du commerce de la drogue. »¹⁴

« La situation est différente en ce qui concerne les conséquences sociales néfastes d'autres drogues illicites (que le cannabis NDLR). Dans plusieurs collectivités ou quartiers du pays, les préjudices subis par

¹² Greene, J. et V. Schiraldi (2002) *Cutting Correctly: New Prison Policies for Times of Fiscal Crisis*. Washington, D.C.: The Justice Policy Institute. Voir aussi Schiraldi, V., Holman, B. et P. Beatty (2000) *Poor Prescription: The Costs of Imprisoning Drug Offenders in the United States*. Washington, D.C.: Justice Policy Institute. Disponible en ligne à : www.cjci.org

¹³ McCaffrey, B.R., « Remarks before the First Annual Criminal Justice and Substance Abuse Conference », Albany, New York, June 29, 1999.

¹⁴ Témoignage de M Dale Orban pour l'Association canadienne des policiers et policières devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 28 mai 2001, fascicule no 3, page 49.

d'innocentes victimes de crimes avec violence et de délits contre les biens sont considérables. (...) Ces délits sont commis par des toxicomanes qui essaient de se procurer l'argent nécessaire pour assouvir leur besoin de consommation. »¹⁵

Profondément inscrite dans les perceptions et attitudes, cette croyance, dont on verra plus loin au chapitre 6 que les données de recherche ne la soutiennent que pour partie, s'est traduite concrètement par une série de mesures dont la création des tribunaux spéciaux sur les drogues et l'instauration d'ordonnances de traitement pour les délinquants ayant une problématique avérée de dépendance, l'expansion des programmes de tests d'urine dans les milieux de travail et dans les prisons ainsi que le remodelage des systèmes de prise en charge socio-communautaires sont des exemples.

Cette association drogues-délinquance se posait sur un terrain fertile. Pour plusieurs raisons – mutations entraînées par la globalisation et le réalignement du rôle de l'État qui expliquent au moins pour partie l'accroissement des inégalités sociales et économiques entre le Nord et le Sud mais aussi au sein des pays, tant du Nord que du Sud ; augmentation de l'insécurité des conditions de vie elles-mêmes après la fin des Trente Glorieuses (1945-1975) qui avaient connu une période sans précédent de prospérité et une sécurité de l'emploi plus grande que jamais ; fractures au sein des collectivités induites par ces incertitudes et par l'incapacité à gérer les mixités de populations – l'augmentation de la criminalité « ordinaire » (vols par effraction, vols de véhicules, vandalisme, etc.) devient la métaphore par excellence de l'insécurité des conditions d'existence. Cible facile avec sa multitude d'impacts bien réels sur la vie au quotidien dans des quartiers déjà sujets à d'autres difficultés sociales et économiques, la petite criminalité invite alors à des réponses musclées, répressives : dans tous les pays occidentaux, on voit augmenter, à partir du milieu des années 1980, le recours à l'incarcération et s'allonger la durée des peines. À cette « crise » de la sécurité collective, s'ajoute la fracture entre les générations, faisant en sorte que les jeunes deviennent comme groupe une source d'inquiétude, voire tout simplement des délinquants potentiels. Un exemple : le Canada a connu au cours de cette période une augmentation sans précédent du recours à la détention pour les mineurs, le plaçant tout au haut de la liste des pays industrialisés.¹⁶ Quant on sait que les jeunes sont les principaux usagers de drogues, le reste de l'équation est vite établi.

Des politiques antidrogues aux politiques sur les drogues

L'arrivée du SIDA au cours des années 1980 va toutefois contribuer à une remise en question des politiques prohibitionnistes en matière de drogues illicites. On

¹⁵ Témoignage de M Michael J. Boyd, pour l'Association canadienne des Chefs de police devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, fascicule no 14, 11 mars 2002, page 76.

¹⁶ Là-dessus, voir entre autres Bala, N. et coll., (dir.) (2002) *Juvenile Justice Systems. An international Comparison of Problems and Solutions*. Toronto : Thompson Educational Publishing

découvre en effet, vers la fin de la décennie, que les usagers de drogues par injection intraveineuse ont un taux élevé de prévalence du VIH et d'autres pathogènes comme l'hépatite. En fait, il s'agit, après les pratiques homosexuelles et bisexuelles, de la seconde cause d'infection chez les hommes, et la seconde aussi chez les femmes hétérosexuelles.¹⁷ Les politiques répressives, centrées sur l'interdiction de l'usage, ne permettent pas ni d'informer adéquatement les usagers ni d'adopter des mesures de réduction des risques et de prévention telles l'échange de seringues ou les sites d'injection supervisés. L'expansion des pratiques de réduction des méfaits prendra appui dans plusieurs pays sur cette nouvelle réalité.

La création d'observatoires des tendances d'usage des drogues illicites est un autre élément contribuant à la remise en question des politiques sur les drogues. Jusqu'au milieu des années 90, les USA, le Royaume-Uni et l'Australie sont à peu près les seuls pays à disposer de systèmes réguliers et répétés d'enquête épidémiologique des tendances de consommation des drogues dans les populations. À compter de 1993, l'Europe, avec la mise sur pied de l'Observatoire européen sur les drogues et les toxicomanies et la constitution du réseau d'observation des tendances dans les pays de l'Union européenne, se donne un outil fort de suivi des tendances. Or, ce système d'observation régulière aura entre autres effets celui de démontrer que les tendances d'usage de drogues ne varient pas tant selon les politiques publiques des États que selon d'autres facteurs d'ordre social, culturel et symbolique.

Enfin, un certain nombre d'États commencent à interroger leurs politiques publiques sur la base d'études d'évaluation des impacts. C'est notamment le cas de l'Australie et de la Suisse ainsi que de certains États américains. Au delà de la rhétorique souvent émotionnelle, on découvre dans ces études que les politiques, en plus d'avoir peu d'impacts sur les usages, ont des effets pervers importants et des coûts économiques élevés. Ce sont d'ailleurs les résultats de certaines études du rapport coût-efficacité qui vont amener la Californie et d'autres États américains à revoir leurs approches hautement répressives (par exemple incarcération automatique à la troisième infraction, quelle qu'elle soit).¹⁸

Si les législations nationales en matière de drogues illicites, notamment de cannabis, ne changent pas dans les faits, on discerne néanmoins une tendance nette à questionner les pratiques, notamment judiciaires, et à chercher des alternatives tout en respectant les Conventions internationales. C'est le cas de l'Espagne, de l'Italie, de certains états australiens, de la Belgique et plus récemment du Portugal et de la Suisse.

¹⁷ Riley, D., (1998), *op. cit.*, page 14.

¹⁸ Voir par exemple, l'étude de Rydell, C. P., et S. S. Everingham, (1994) *Controlling Cocaine: Supply vs. Demand Programs*, RAND : Santa Monica, California.

MUTATIONS AU CANADA

Nous identifions trois grandes sources de changements au Canada au cours de cette même période, qui ont des effets parfois paradoxaux, soit l'activisme judiciaire induit par l'adoption en 1982 de la Charte canadienne des Droits et Libertés, l'adoption en 1999 de la Stratégie nationale de sécurité des collectivités et de prévention du crime, et la lutte au crime organisé. Dans la mesure où nous discuterons plus amplement de chacun de ces éléments dans des chapitres ultérieurs du rapport, nous serons volontairement brefs ici, nous contentant de broser un large contexte.

L'activisme judiciaire

Il n'est sans doute pas de meilleur exemple, en matière de cannabis, que la décision de la Cour d'appel de l'Ontario dans l'affaire Parker.¹⁹ Dans cette affaire, les juges de la Cour d'appel ont examiné la validité constitutionnelle de la prohibition de la marijuana en vertu de la Loi réglementant certaines drogues et autres substances dans le cadre de son utilisation à des fins médicales. Les juges ont unanimement décidé que les allégations de Terrance Parker, à l'effet que cette interdiction violait ses droits fondamentaux en vertu de l'article 7 de la Charte canadienne des Droits et Libertés étaient fondées. Le juge Rosenberg, pour la majorité, a écrit que Parker a besoin de marijuana pour contrôler les symptômes de son épilepsie et que la prohibition de culture et de possession est en conséquence inconstitutionnelle. Les juges ont donc déclaré que les dispositions législatives étaient nulles et non avenues. Par contre, ils ont suspendu l'application de cette décision pour une année, donnant ainsi le temps au gouvernement d'adapter la loi en conséquence. Suite à cette décision, le Gouvernement a édicté en juillet 2001 une réglementation qui circonscrit l'usage du cannabis à des fins médicales et entamé une série d'études sur les effets précis du cannabis à des fins thérapeutiques.

D'autres décisions des tribunaux ont modifié, dans des directions diverses, l'applicabilité des dispositions de la loi en vigueur en matière de drogues, notamment sur les pouvoirs des policiers. Ces diverses décisions font l'objet d'une analyse détaillée aux chapitres 14 et 15.

Règle générale, on constate que, depuis l'adoption de la Charte, les tribunaux jouent un rôle de plus en plus important dans la vie politique canadienne, et la question des drogues n'a pas échappé à cet activisme judiciaire. D'ailleurs, une autre affaire, celle-ci portant sur l'usage du cannabis à des fins non médicales, devrait être entendue au cours des prochains mois par la Cour suprême du Canada.

¹⁹ R. c. Parker 49 O.R. (3^e) 481

Une stratégie nationale de prévention du crime

En 1999, suite aux travaux du Conseil national de prévention du crime, le gouvernement fédéral crée la Stratégie nationale de sécurité des collectivités et de prévention du crime. Cette stratégie nationale, dotée d'abord de budgets de 35 millions \$ par année, haussés à environ 65 millions \$ cette année, a pour objectif de prévenir la délinquance par les actions de développement social dans les communautés en agissant notamment sur les facteurs de risque chez les enfants et chez les jeunes. Si la stratégie ne mentionne pas spécifiquement la prévention de l'usage des drogues, un certain nombre de ses projets et actions porteront rapidement sur cet enjeu, et de diverses manières.

Ainsi, le Centre juge à-propos de financer deux projets-pilote de tribunaux spéciaux sur les drogues, d'abord à Toronto puis à Vancouver, dans une visée de prévention de la récidive reliée à l'abus de drogues. De même, le Centre soutient une action de la Fédération canadienne des municipalités visant à instaurer des collectivités sans drogues dans un certain nombre de villes. Et le Centre soutient aussi l'évaluation des programmes de mesures alternatives pour les jeunes accusés de possession de cannabis.

La lutte au crime organisé

S'il est un sujet judiciaire qui a suscité beaucoup de débats publics, mené à l'adoption de nouvelles lois accordant plus de pouvoirs aux forces de police, et conduit à des opérations de police spectaculaires et à des procès non moins spectaculaires, c'est celui du crime organisé, notamment des groupes de motards criminalisés au Québec, les mafias italo-canadiennes de Montréal, et les réseaux asiatiques de l'héroïne sur la côte Ouest.

En 1995, le Parlement canadien adoptait le projet de loi C-95 afin de donner aux policiers de meilleurs outils pour faire enquête sur les personnes prenant part aux activités des gangs et intenter des poursuites contre elles. Quatre ans plus tard, trois problèmes ont incité le Gouvernement à proposer des modifications au *Code criminel* et à d'autres lois : des difficultés dans l'application de la loi, l'influence croissante du crime organisé au Canada et les activités illégales commises par des policiers lors d'opérations d'infiltration. En 1999, l'adoption du projet de loi C-51 par le Parlement fédéral (une loi omnibus modifiant le *Code criminel*), a accordé une immunité pénale aux policiers qui devaient commettre des infractions dans le cadre d'une enquête ou dans l'accomplissement d'autres fonctions pour les fins d'application de la Loi régissant certaines drogues et autres substances. Selon le gouvernement, cette modification avait comme objectif d'appuyer les policiers dans la lutte contre le crime organisé et le blanchiment d'argent.

Par ailleurs, un sous-comité du Comité permanent de la justice et des droits de la personne de la Chambre des communes a déposé, le 19 octobre 2000, un rapport proposant une série de modifications qui pourraient être apportées au *Code criminel* afin

de faciliter la lutte contre les organisations criminelles. Ce dernier était mieux connu sous le nom de Sous-comité sur le crime organisé. Il a entrepris ses travaux en avril 2000 et vue la nature du sujet soumis à l'étude, ses membres ont décidé dès le début, d'effectuer leurs travaux à huis clos. Ce Comité a entre autres recommandé de modifier le *Code criminel* de manière à en regrouper toutes les dispositions visant des activités connexes au crime organisé dans une partie spécifique qui aurait pour titre « Criminalité érigée en entreprise, infractions désignées en matière de drogue, gangs et blanchiment d'argent ». Plusieurs recommandations de ce Comité ont été reprises dans le projet de loi C-24 qui a reçu la sanction royale en décembre 2001.

UN DÉBAT DE SOCIÉTÉ

Ces considérations sur l'environnement contribuent à situer dans son contexte le débat sur les drogues. Marqué toujours au coin des enjeux de sécurité publique, le débat porte plus fondamentalement sur les bouleversements qui traversent les sociétés à travers les phénomènes de mondialisation et de globalisation. La place des drogues dans ces sociétés qui passent difficilement de la modernité à la post-modernité, tentant de réinventer le social après que la destinée individuelle, si centrale aux «révolutions» culturelles des années 60, eut remplacé le destin familial et collectif, soulève en effet des questions relatives aux frontières de l'individuel dans son rapport à l'autre et à la possibilité même de la collectivité face à la prégnance de l'individu. Comme le souligne le sociologue A Ehrenberg :

*« (...) le drogué se présente comme le condensateur de la responsabilité incertaine. Pour les sociétés démocratiques, il est le lieu d'une interrogation sur les limites de la liberté privée, c'est-à-dire sur la tension entre le minimum de contact avec soi, sans lequel on ne peut entrer en relation avec autrui, et le minimum de distance à soi, sans lequel on ne peut pas faire société. »*²⁰

C'est aussi ce que disait, d'une autre manière, le professeur B.K. Alexander, dans un texte qu'il a soumis au Comité du Sénat :

[Traduction] *« Si l'on admet que les principes de libéralisme économique sur lesquels sont basées les sociétés occidentales produisent une dislocation des rapports sociaux, et si l'on admet que cette dislocation est l'un des précurseurs à des comportements addictifs, alors l'addiction aux drogues mais aussi à tous les substituts à la vie sociale dans nos sociétés ne sont pas la caractéristique pathologique de quelques-uns mais à des degrés divers une condition générale. Et puisque le libéralisme devient le modèle de base de la mondialisation, l'addiction est de plus en plus répandue sur la terre (...). »*²¹

²⁰ Ehrenberg, A., (1995) *L'individu incertain*. Paris : Calman Lévy, page 163.

²¹ Alexander, B.K., (2000) « The globalization of addiction. » *Addiction Research*, vol. 8, no. 6, page 504.

La question des drogues, on le voit, ne peut simplement se poser en termes de pénalisation ou dépenalisation, car elle renvoie à des enjeux de société beaucoup plus profonds, tenant au rôle du gouvernement de soi dans un contexte où le gouvernement politique de la collectivité est en mutation, et au rapport entre les deux. Réduire la question des drogues à un enjeu de législation pénale plus ou moins répressive ou plus ou moins libérale, c'est faire l'économie d'interrogations plus larges et c'est faire le jeu des intérêts particuliers d'institutions qui ont intérêt à réduire la figure du drogué à l'autre, au déviant, au pathologique, et les drogues aux seules drogues illicites, alors que les figures de la drogue sont multiples et diverses. Comme le soulignait d'ailleurs le rapport de l'Organe international des stupéfiants pour 2000, le trafic de médicaments psychoactifs et l'augmentation de leur consommation sont, à bien des égards, des phénomènes beaucoup plus préoccupants que le marché des drogues illicites. Il y a grand risque à prendre la pointe de l'iceberg pour l'iceberg dans son ensemble et à se laisser dériver ainsi sur des continents aussi simplificateurs qu'ils sont dangereux pour une véritable politique publique en matière de drogues.

PARTIE II

LE CANNABIS : EFFETS, USAGES, ATTITUDES

CHAPITRE 5

LE CANNABIS : DE LA PLANTE AU JOINT

Cannabis, marijuana, pot, herbe, kif, grifa, ganja, autant de cultures, autant de manières de nommer la drogue issue du *cannabis sativa indica*, l'une des deux principales variétés du chanvre. Il ne s'agit pas uniquement de dénominations mais aussi des modes d'utilisation et des contextes d'usages différents : ici, la mari est roulée dans un papier avec du tabac à cigarette (joint), là le kif sera fumé à la pipe, et là encore le *ganja* sera fumé dans une pipe à eau. Elle est parfois incorporée à des biscuits ou à des gâteaux. Le pétard, le joint ou le *bangh* indien sont des manières de nommer le produit consommé et désignent en même temps des usages différents : la mari est le plus souvent composée des sommités fleuries et de feuilles séchées réduites en poudre ; la *sinsemilla* est une préparation de sommités femelles d'une variété privée de graines tandis que la ganja indien est composé uniquement de sommités fleuries fécondées.¹

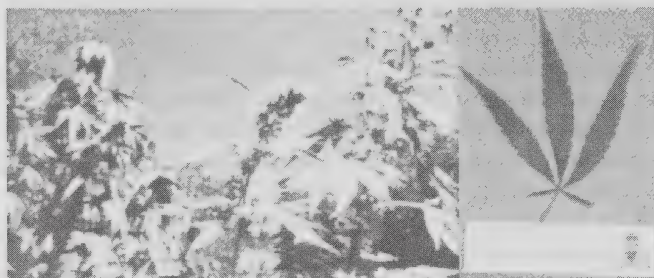
Ces appellations ne sont pas de simples accidents folkloriques : comme pour d'autres substances, le cannabis a ses usages codifiés variables selon les cultures. Les mots utilisés pour nommer la même drogue renvoient à un ensemble de rapports qu'entretiennent les populations de diverses cultures avec elle, une sorte de code des manières mais aussi des raisons de consommer. En Amérique (États-Unis et Canada), la mari a longtemps été identifiée à la jeunesse et à la libération sexuelle des années 60 ; en Inde ou en Jamaïque, le *ganja* a des dimensions religieuses qu'il n'a pas nécessairement en Occident ; et cette drogue, la même pourtant, a d'autres significations culturelles encore au Maghreb. Nous y reviendrons au chapitre 7.

Ce chapitre décrit d'abord la plante et les variantes sous lesquelles elle devient une drogue de consommation. Il examine ensuite brièvement l'origine géographique de la plante de cannabis et les circuits contemporains de sa circulation, notant au passage les modes actuels de production sous serre et hydroponique qui se sont développés dans certaines régions du Canada. Il décrit ensuite la pharmacocinétique de la plante de cannabis, notamment ses principaux composants actifs et leur métabolisme dans le corps.

¹ Voir notamment INSERM (2001) *Cannabis. Quels effets sur le comportement et la santé ?* Paris : Les Éditions Inserm, page 143 passim ; ben Amar M. « Le cannabis » (sous presse) ; Wheelock, B.B. (2002) *Physiological and Psychological Effects of Cannabis : review of the Findings*. Rapport préparé pour le Comité spécial du Sénat sur les drogues illicites, Ottawa : Sénat du Canada.

UNE PLANTE, DIVERSES DROGUES ²

Il existe plusieurs variétés de cannabis. Les plus connues sont *Cannabis sativa*, *Cannabis indica* et *Cannabis ruderalis*. Le *Cannabis sativa* est la principale variété qui pousse sous presque tout climat. Dans des sols secs, sablonneux et légèrement alcalins il fournit des plants pouvant atteindre jusqu'à sept mètres de hauteur. Au Canada, c'est le *Cannabis indica* qui est préférablement cultivé en sol. Il fournit des plants plus courts, mais plus concentrés en Δ^9 -THC (le principal composant actif du cannabis discuté plus amplement plus loin). Il existe des plants mâles et femelles. En général, les plants femelles sont plus riches en Δ^9 -THC que les mâles, qui sont souvent plus dégarnis et plus petits. Le Δ^9 -THC se trouve surtout dans une résine que sécrètent les extrémités florales.



Têtes de plants et feuille de cannabis

Il semble que le cannabis a d'abord été connu en Chine il y a environ 6 000 ans. On en trouve ensuite en Inde, puis au Moyen-Orient, en Afrique, au Mexique et en Amérique du Sud. La culture du cannabis peut prendre plusieurs formes. Parfois, la culture est pratiquée dans des serres ou en culture hydroponique, ce qui permet d'augmenter la productivité des plants et d'obtenir des teneurs élevées en Δ^9 -THC. Les méthodes de sélection génétique des meilleures variétés et de cultures sous serre ont aussi permis d'augmenter le contenu en principe actif.

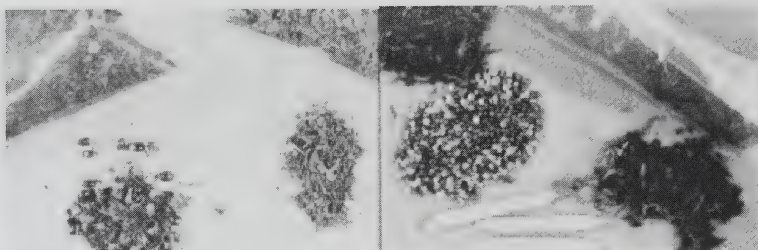
² Cette section s'inspire librement des divers travaux, notamment ceux de Ben Amar (sous presse), de l'INSERM, *op. cit.*, et de la Conférence scientifique internationale sur le cannabis (2002). Nous tenons à remercier notamment le professeur Ben Amar de nous avoir permis de reproduire les planches.



Plants de cannabis mâles et femelles

Terme mexicain employé initialement pour parler de tabac à bon marché, mais qui plus tard désigne certaines parties de la plante du cannabis, la *marijuana* est généralement de couleur verte ou brune et dégage une odeur caractéristique lorsqu'elle brûle. Son apparence ressemble à l'origan ou au thé haché.³ La marijuana provient de l'ensemble des parties de la plante qui ont été séchées. Sous cette forme, son contenu en THC est inférieur ; il augmente notamment en sélectionnant les extrémités florales du plant femelle. Ainsi séchée et réduite en une poudre grossière, la marijuana est le plus souvent roulée en cigarettes fines avec du tabac à cigarette dans la plupart des cas (joint), parfois fumée aussi à l'aide d'une pipe ou moins fréquemment sous forme de cigares. Un joint typique contient entre 0,5 et 1 g de cannabis. On peut aussi, comme pour le haschich, l'inclure dans des préparations de biscuits et de gâteaux. Il sera aussi bu sous forme d'infusions. Certains nous ont dit que la production contrôlée, sous serre, de cannabis domestique coûte environ 100 \$ l'once, qui sera ensuite vendu à un prix moyen variant entre 200 \$ et 250 \$ sur le marché. Cette estimation du coût de production nous semble largement exagérée. Par contre, les seules autres études disponibles portent sur les coûts de production dans des pays en développement, tels le Maroc.

³ Sur ces questions voir notamment : McKim W.A. (2000) «Cannabis ». in McKim, W.A. (ed.) *Drugs and Behavior. An introduction to behavioral pharmacology*. Upper Saddle River : Prentice Hall. ; Santé Canada (1990) *Les drogues. Faits et méfaits.* Ottawa : Ministère des approvisionnements services ; et Comité permanent de lutte à la toxicomanie (2001) *Drogues. Savoir plus. Risquer Moins.* (Édition québécoise). Montréal : Stanké.



Marijuana et joints

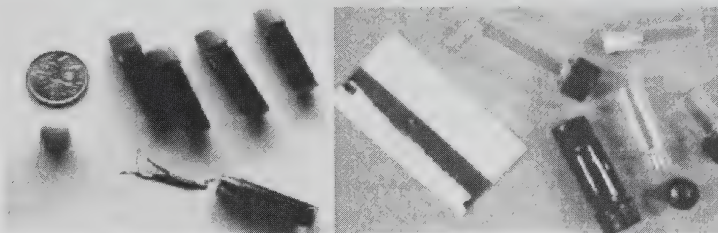
Le *haschich*, ou encore haschich, aussi connu sous l'appellation de hasch, shit, kif (en Afrique du Nord) ou *charas* (en Inde), résine visqueuse produite par la plante et obtenue par battage des feuilles et des sommités florales sèches qui est ensuite compressée pour obtenir ce qu'en France on appelle une barrette, ici un cube ou un bloc. Il faudra environ 45 à 75 kg de cannabis pour produire un kilo de haschich. Il se présente sous forme de morceaux de couleur brun pâle à noir, de consistance molle ou dure. Il est fréquemment fumé, seul ou mélangé au tabac ou à la marijuana, sous forme de cigarette (joint), à l'aide d'une pipe ou plus rarement sous forme de cigare. Il peut aussi être inclus dans des biscuits ou des gâteaux. La teneur en Δ^9 -THC du haschich est généralement comprise entre 3 et 6 % lors d'une production normale. De même que pour le cannabis, le contenu en Δ^9 -THC sera augmenté par les méthodes de culture et par la concentration de résine, pour atteindre en production moyenne des teneurs de plus de 10 %. Légèrement plus dispendieux que la marijuana, le haschich se vend environ 300 \$ à 350 \$ l'once sur le marché.



Haschich

Il existe deux autres produits issus du cannabis, les huiles de marijuana et de haschich, extraites de la résine par de l'alcool à 90° évaporé par la suite par exposition au soleil. Il s'agit d'un liquide visqueux, brun-vert à noirâtre, d'odeur vireuse. Les huiles sont généralement plus concentrées en cannabinoïdes, pouvant atteindre des

teneurs de 30 à 60 % en Δ^9 -THC. Les huiles sont généralement déposées sur le papier à cigarettes ou imprégnées dans du tabac puis fumées. Les huiles sont plus rares et plus dispendieuses.



Huiles de cannabis

L'extrait qui suit, tiré d'un rapport préparé par MM Labrousse et Romero pour l'Observatoire français des drogues et des toxicomanies en 2001 sur la production de cannabis au Maroc, décrit très bien les diverses étapes de production.

Du cannabis à l'huile – processus de fabrication au Maroc

Le kif est le nom donné au plan de cannabis entier. (...) Coupé et séché au soleil (en général sur les toits) pendant au moins un mois et demi, il est conservé dans les maisons pendant plusieurs mois sous la protection de bâches en plastique. Haché à la main sur une planchette à l'aide d'un couteau spécial, il sera mélangé à du tabac pour être fumé. Traditionnellement, le mélange comprend 1/3 de kif et 2/3 de tabac. Il est fumé dans le *sebsi*, longue pipe en bois au fourneau de terre cuite ou de pierre.

La *chira* est la poudre résultant de la solidification des gouttelettes de résine exsudant des sommités des plantes femelles. Pour séparer la résine des plants séchés, les transformateurs battent ou secouent ces derniers au-dessus d'un fin voile de nylon tendu qui fait office de tamis. La première poudre qui tombe, de couleur beige-doré, est appelée *sigirma*. C'est la première qualité, dite double-zéro, réputée contenir jusqu'à 20 % de THC. Ensuite tombe une poudre nommée *hamda*, mêlée de déchets végétaux qui lui donnent une couleur verdâtre. Cette *hamda* est plus ou moins tamisée, pour donner différentes qualités de produit : zéro, no1, no2, no3, et no4 (la plus médiocre), contenant respectivement de 10 à 2 % de THC. (...) Il faut environ 100 kilos de kif pour obtenir un kilo de haschich de première qualité.

Les paysans (...) nous ont indiqué que la suite des opérations, lorsqu'elle est réalisée par des trafiquants, se déroulait dans des bâtiments isolés dans la montagne censés être secrets. (...) Là, mise dans des sachets de cellophane, la poudre est chauffée et compressée, pour donner la résine ou haschich, destinée à la commercialisation, présentée sous forme de savonnettes ou de plaquettes (généralement de 250 grammes) appelées *thisla* ou « petit plateau ». (...) La qualité « double zéro » qui tire son nom des deux trous faits sur la tablette avec le bout incandescent d'une cigarette, est réservée à la consommation intérieure et aux clients privilégiés. Les clients étrangers, mal informés, n'ont souvent droit qu'à du haschich fortement coupé de cirage noir, colles, henné, figue, terre, voire médicaments.

(...) L'huile de cannabis est obtenue à partir des résines de qualité no3 et no4. On la fabrique en délayant le haschich dans un récipient d'alcool pharmaceutique. Après distillation pendant 6 à 8 heures, le liquide est filtré et remué jusqu'à évaporation complète de l'alcool. La production locale de ce liquide à haute valeur ajoutée (il faut 10kg de haschich pour obtenir un litre d'huile) est moins marginale qu'on ne le pense généralement.

Labrousse, A. et L. Romero (2001) *Rapport sur la situation du cannabis dans le RIF marocain*. Paris : OFDT.

ROUTES DU CANNABIS

D'où proviennent le cannabis et le haschich disponibles au Canada ? Quelles quantités sont importées et produites localement ? Quelles sont les routes de circulation entre provinces ? Quelles quantités sont exportées vers d'autres pays ? Quelle est la valeur financière de ce marché ? Ces questions reviennent constamment dans l'esprit de chacun, de même que dans les discours. Elles servent qui à souligner l'ampleur du problème des drogues généralement, qui à expliquer la puissance du crime organisé qui en tire ses revenus, qui encore à justifier le décalage entre l'importance du problème et les ressources limitées que consacrent les États à la réduction de l'offre. Mais ces données peuvent aussi aider à mieux saisir l'ampleur des difficultés que vivent les paysans dans les divers pays producteurs, les enjeux écologiques que pose la culture des drogues, de même que le positionnement stratégique des drogues dans la géopolitique mondiale.

La culture du cannabis est la plus répandue de toutes les drogues illicites ; pas étonnant dans la mesure où non seulement la plante pousse librement sous plusieurs climats, mais où elle demande aussi peu de transformations avant de devenir marijuana. Selon le rapport 2000 du *Programme des Nations Unies sur le contrôle des drogues* (UNDCP) :

[Traduction] « *Au cours de la dernière décennie, 120 pays ont rapporté la culture illicite de cannabis sur leur territoire. À partir des saisies faites en 1998 Interpol a identifié 67 pays source de cannabis. (...) Il est beaucoup plus difficile d'estimer l'étendue des cultures illicites, de la production et du trafic de cannabis que pour d'autres plantes productrices de drogues en raison de la grande quantité de cannabis sauvage, de la diversité des méthodes de culture et de l'ampleur du trafic. Contrairement à d'autres drogues issues de plantes, les produits du cannabis peuvent provenir de trois sources qualitativement distinctes de production : les cultures extérieures illicites, les plantations sauvages exploitées et les cultures intérieures utilisant une technologie sophistiquée. (...) Le nombre de pays ayant rapporté une augmentation de la consommation de cannabis (deux-tiers de tous les pays ayant fourni des statistiques sur l'abus de drogues en 1996) indique que la production globale aurait augmenté ; mais les données de saisies ne confirment cette hypothèse qu'en partie. (...) Les estimations de la culture de cannabis (incluant les cultures sauvages) à partir des rapports des États membres au cours des années 1990 sont entre 670 000 et 1 850 000 hectares. Les estimations de production varient selon un facteur de 30, entre 10 000 et 300 000 tonnes. Reliant les estimations de production et de consommation, UNDCP estime que la production de cannabis dans le monde est d'environ 30 000 tonnes.* »⁴

On constate la grande variabilité des estimations et la difficulté immense de les valider. Comment en effet, estimer la quantité de plants de cannabis qui sont transformés en marijuana ? Les données produites par les gouvernements de divers pays sur les surfaces cultivées ne sont elles-mêmes que des approximations. Quant à

⁴ United Nations Office for Drug Control and Crime Prevention (2001) *World Drug Report 2001*. Oxford : Oxford University Press, pages 30-32. Disponible en ligne à http://www.undcp.org/adhoc/world_drug_report_2000/report_2001-01-22_1.pdf

Variabilité des estimations – le cas du Maroc

L'étude de Labrousse et Romero indique que, selon le Ministère de l'Agriculture, les surfaces de production de cannabis toucheraient 75 000 hectares en 2000. (Par comparaison, le rapport 2000 de l'ODCCP cite le chiffre de 50 000 hectares de production de cannabis au Maroc, chiffre fourni officiellement par le Ministère de l'intérieur.)

Leur propre travail sur le terrain propose des superficies de 90 000 hectares pour 1999 et entre 100 000 et 120 000 pour 2001. Cette production concernerait environ 200 000 familles, soit entre un million et un million et demi de personnes. Pour une telle superficie, la production, une fois déduit le kif consacré à la consommation nationale, serait entre 1 600 et 3 000 tonnes.

Labrousse et Romero, *op. cit.*

savoir combien de serres et autres formes de production intérieure existent, il n'y a à proprement parler, aucun moyen de le savoir.

Les travaux de l'équipe de l'Observatoire géopolitique des drogues en France sous la direction d'Alain Labrousse demeurent exemplaires en la matière. L'encadré ci-contre, tiré du même rapport produit pour

l'OFDT en 2001, fait état d'un travail terrain de trois mois où les auteurs ont procédé au recoupement de données provenant de sources diverses.

On constate surtout que, lorsque relié à la population des consommateurs potentiels de cannabis (que l'Office estime à environ 120 millions de personnes), l'estimé de production globale à 30 000 tonnes est beaucoup plus près du plancher de 10 000 tonnes que du plafond de 300 000.

Selon UNDCP, les principaux producteurs sont la Colombie et le Mexique pour la marijuana, le Maroc pour le haschich. Selon l'organisation internationale de police criminelle (Interpol) le Maroc, l'Afghanistan et le Pakistan sont les principaux pays sources de haschich et la Colombie, le Niger et l'Afrique du Sud de cannabis. Enfin, selon Labrousse, les productions de marijuana explosent, la Colombie redevenant le grand producteur qu'elle était dans les années 1970, les productions progressant rapidement en Afrique de l'Ouest (Nigeria, Ghana, Congo, Côte d'Ivoire, Sénégal), cependant que les grandes plaines de la CEI (Kazakhstan, Kirghizistan, Ukraine, Biélorussie et Azerbaïdjan) représentent un potentiel d'exportation quasi illimité, tandis que l'Afghanistan et le Pakistan produisent probablement 2000 tonnes de haschich, l'équivalent de la production marocaine.⁵ Par ailleurs, le Canada lui-même est l'un des pays exportateurs de cannabis depuis plusieurs années déjà.⁶

Traditionnellement, le cannabis disponible au Canada provenait principalement du Mexique, de la Jamaïque, et de pays du cône sud de l'Afrique, tandis que le haschich provenait principalement de l'Asie et du Moyen Orient :

« Le marché du haschich dans le centre et l'est du Canada est connu dans le monde entier. Les criminels américains sont parmi les trafiquants internationaux qui orchestrent des envois de plusieurs tonnes de

⁵ Labrousse, A. (2000) *Drogues. Un marché de dupes*. Paris : éditions alternatives ; voir aussi : « L'approvisionnement des marchés des drogues dans l'espace Schengen. » *Les Cahiers de la Sécurité Intérieure*, 32, 2^e trimestre 1998.

⁶ Cité dans OGD (1996) *Atlas mondial des drogues*. Paris : PUF.

cette drogue du Pakistan à destination de Montréal par navire ravitailleur ou par conteneur. En 2001, des envois ont transité par les Émirats arabes unis, l'Afrique et l'Europe avant de parvenir au Canada. On importe également des chargements de plusieurs kilos de la Jamaïque par le biais de passeurs voyageant à bord de vols commerciaux. »⁷

Si une large partie du cannabis en vente sur le marché canadien était d'origine étrangère jusqu'aux années 1980 environ, la situation s'est fortement modifiée depuis. On estime en effet que la production nationale a maintenant supplanté les importations. Ainsi, le rapport de la Gendarmerie Royale du Canada pour 1999 fait état de ce qui suit :

« On estime que plus de 50 % de l'approvisionnement de marihuana au Canada est produit au pays. En ce qui a trait à la marihuana de l'étranger saisie au Canada ou en route vers le Canada en 1999, au moins 5 535 kilos provenaient de la Jamaïque, 825 kilos de l'Afrique du Sud et 860 kilos du Mexique. Les envois de l'étranger sont expédiés directement au Canada ou via les États-Unis. Le 11 juin 1999, à Newark (New Jersey), le service des douanes des États-Unis a intercepté 2 464 kilos de marihuana de la Jamaïque et 141 kilos d'huile de cannabis dans un conteneur maritime en partance pour Montréal. De plus, le 20 juin 1999, à Stuart (Floride), on a saisi 2 617 kilos de marihuana de la Jamaïque, qui était destinée au Canada, dans le cadre du projet JOULE. »⁸

Combien de cannabis et de haschich sont disponibles au Canada ? Quelle est la valeur économique de ces drogues ? Il est en fait impossible de répondre à ces questions, pour des raisons évidentes, ces drogues étant illégales. Alors qu'on connaît la quantité de tabac produit et vendu sous forme de cigarettes, alors qu'on sait quel est le volume d'alcool produit ou importé et consommé, et que dans les deux cas on peut traduire ces volumes en chiffres d'affaires, il est impossible de le faire pour les drogues illicites.

Pendant un certain temps, le Programme des Nations Unies sur les drogues avançait que la valeur totale de « l'industrie » des drogues illicites équivalait à 400 milliards \$ US, soit une valeur plus élevée que l'industrie pétrolière.⁹ De ce montant, on ne peut évidemment extraire la valeur du cannabis, même si l'on sait par ailleurs que la consommation de cannabis concerne le plus grand nombre de personnes. Comment, sur quelle base, avance-t-on ces chiffres, personne ne le sait vraiment. S'ils ont été produits à partir d'une méthode rigoureuse de calcul ou s'ils ont été lancés au hasard d'un repas sur le coin de la nappe, nous l'ignorons.¹⁰ Pourtant, ces chiffres servent souvent de référence. Ainsi, le très sérieux magazine britannique *The Economist*

⁷ Gendarmerie Royale du Canada (2002) *Situation au Canada – Drogues illicites (2001)*. Ottawa : Direction des renseignements criminels - GRC.

⁸ Gendarmerie Royale du Canada (2000) *Situation au Canada – Drogues illicites (1999)*. Ottawa : Direction des renseignements criminels - GRC.

⁹ PNUCID, (2000) *op. cit.*

¹⁰ Le Comité a invité le Directeur exécutif du PNUCID ou un délégué à venir témoigner devant lui mais a essuyé un refus.

dans une série d'articles publiés en 2001 sur la question des drogues illicites, citait ce montant avant de proposer une estimation plus conservatrice à environ 150 milliards \$US.¹¹ Par comparaison, la valeur de l'industrie pharmaceutique avoisine les 300 milliards \$, celle du tabac est de 204 milliards \$ et celle de l'alcool de 250 milliards.

Puisque les auteurs détaillent leurs méthodes de calcul, poursuivons l'analyse de l'exemple marocain.

Rendements et rapports du cannabis – le cas du Maroc

Le cannabis est une plante peu exigeante qui pousse sur des sols de mauvaise qualité, mais qu'il contribue assez vite à rendre inapte à toute forme d'agriculture. Le caractère illégal de cette culture fait que les revenus qu'elle procure sont sans commune mesure avec les cultures vivrières ou de rente légale. En outre, c'est un produit non périssable, que l'on peut écouler à domicile, toujours sûr de trouver un marché, permettant la vente à crédit, etc. Il permet notamment l'amélioration des conditions d'habitat de la population et l'ouverture de route sur l'initiative des paysans eux-mêmes.

L'estimation des revenus du cannabis à l'hectare varie en fonction des sols, de la pluviométrie, du fait qu'il soit irrigué ou non, transformé ou non en chira (poudre), de la période de la vente, etc. En outre, pour les mêmes critères on trouve des estimations différentes de la part des chercheurs. Cela est dû au fait qu'il est difficile d'obtenir de la part des paysans, du fait de leur méfiance, des données fiables. En ce qui concerne la production du kif non transformé, le revenu varie, selon les sources, de 12 450 F (francs français) à 210 000 F à l'hectare.

(...) si le cannabis est très rentable sur des périmètres irrigués, il l'est beaucoup moins sur des terrains pluviaux, surtout les mauvaises années. (...) De nombreux paysans ne cultivant vraisemblablement que de 1,5 ha à 3 ha (non irrigués) de cannabis, ne retirent, les mauvaises années, que de 20 000 F à 40 000 F de cette culture pour faire vivre des familles qui dépassent souvent dix personnes.

(Mais) le cannabis est 12 à 46 fois plus rentable que les cultures de céréales.

En tablant sur une production de 1 397 tonnes de haschich pour l'ensemble du Rif, Pascual Moreno estimait en 1997, le rapport pour les producteurs marocains (du paysan au grand trafiquant) à 1 816 millions \$. Étant donné qu'un certain nombre de trafiquants marocains opèrent à l'étranger, Pascual Moreno estime à 2 000 millions \$ le retour des profits du cannabis dans l'économie marocaine, contre 750 millions \$ pour les exportations de textile ; 460 millions pour les investissements à l'étranger et 1 260 millions pour le tourisme. Le même auteur estime à 3 milliards \$ les bénéfices des trafiquants européens (ce calcul n'inclut apparemment pas la vente de rue).

La culture du cannabis étant cependant plus rentable que toute autre culture, les paysans tendent à abandonner les cultures vivrières pour s'approvisionner sur le marché. Le résultat est que la région devient déficitaire en aliments.

Labrousse et Romero (2001) *op. cit.* : 12-15.

Nous ne connaissons pas de travail terrain équivalent pour le Canada ni même le Mexique. De plus, au Canada, les conditions climatiques ont stimulé le développement des cultures en serre et hydroponique, et on ignore quel serait le rapport entre ces méthodes de culture et les cultures en sol.

Nous usons donc des chiffres et des données qui suivent sur la production de cannabis, l'importation de cannabis et de haschich, et la valeur économique de ces drogues sur le marché canadien, avec beaucoup de réserve et de prudence.

¹¹ « Stumbling in the Dark », *The Economist*, July 28 – August 3, 2001.

Selon la GRC « la production annuelle de marihuana au Canada serait d'au moins 800 tonnes. Ce chiffre semble exagéré, mais les enquêteurs croient plutôt qu'il est très conservateur si l'on se fie aux renseignements recueillis et aux saisies de plantes de marihuana et de marihuana en vrac qui ont été effectuées. En 1999, les services de police canadiens ont saisi environ un million de plantes. »¹² Les rapports pour 1998 et pour 2002 font état des mêmes chiffres. Notons aussi qu'à 800 tonnes, la production canadienne équivaudrait à environ 2,5 % de la production mondiale si on retient le niveau proposé par le PNUCID.

En ce qui a trait à la valeur du marché le rapport annuel 1998/1999 de l'Observatoire géopolitique des drogues rapportait, selon des sources policières, que le marché des drogues illicites au Canada représentait annuellement de 7 à 10 milliards \$.¹³ Pour 2001, la GRC estime que la valeur du marché de l'ensemble des drogues illicites serait de 18 milliards \$!¹⁴ Il est impossible d'estimer la part que représentent le cannabis et le haschich dans ce total. Comme nous ignorons le plus souvent la base de calcul de ces estimations, elles doivent aussi être considérées avec prudence. Comme l'a mentionné le Sous-solliciteur général adjoint lors de sa comparution devant le Comité, les méthodes de calcul, basées sur l'hypothèse que les organisations policières et douanières saisissent 10 % des drogues, n'ont rien de scientifique et sont peu fiables.¹⁵ Nous relevons néanmoins une incohérence apparente : la stagnation apparente de la production de cannabis à 800 tonnes et de l'importation de haschich à 100 tonnes, depuis 1998, de même que la baisse des prix de l'héroïne et de la cocaïne dans un marché stable voire en diminution (rapports de la GRC) ne concordent pas avec le doublement présumé de la valeur totale du marché des drogues. De fait, lorsqu'il faisait face à ces diverses estimations sur la quantité produite et sur la valeur économique de ce marché, le Comité avait souvent l'impression qu'au fond personne ne sait vraiment quelle en serait la taille.

En ce qui concerne le haschich, la GRC estime qu'il

« (...) est plus facile d'estimer la quantité de haschich parvenant sur le marché canadien annuellement que celle de toute autre drogue illicite. En effet, contrairement à ce que l'on observe pour d'autres drogues, comme la cocaïne et la marihuana, que l'on peut trouver partout au Canada et aux États-Unis, la consommation de haschich, en Amérique du Nord, est un phénomène localisé. Cette drogue est fort populaire au Québec, en Ontario et dans les provinces de l'Atlantique, alors que la demande est restreinte ailleurs au Canada et que l'approvisionnement est au mieux sporadique dans le nord-est des États-Unis. Par conséquent, des groupes de criminels organisés de Montréal se sont spécialisés dans l'importation massive de haschich et exercent un monopole sur sa distribution en gros. Compte tenu de ces faits, et des renseignements sur les arrivages de plusieurs tonnes de haschich saisis au Canada et à

¹² Gendarmerie Royale du Canada (2000), *op. cit.*

¹³ Observatoire géopolitique des drogues (1999) *Rapport annuel 1998/1999*. Paris : OGD, page 178.

¹⁴ Greater Toronto Area Combined Forces Special Unit (2002) *Fact Sheet – Heroin*. Disponible en ligne à l'adresse : <http://www.cfseu.org/heroin.html>

¹⁵ M. Paul Kennedy, Témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, fascicule, 10 juin 2002.

l'étranger et sur ceux dont on sait qu'ils sont entrés sur le marché canadien, des analystes de la GRC estiment qu'au moins 100 tonnes de cette drogue sont importées au Canada chaque année. »¹⁶

Par ailleurs, le Canada est aussi une terre de transit de drogues vers les États-Unis et une partie importante du cannabis canadien est destiné à l'exportation, notamment vers les États-Unis.

« Les autorités de part et d'autre de la frontière s'inquiètent de l'introduction aux États-Unis de marihuana du Canada. Bien que cette activité soit particulièrement perceptible à la frontière entre la Colombie-Britannique et les États-Unis, elle ne se limite pas à cette province. Selon les renseignements recueillis, les Hell's Angels du Québec approvisionnent leurs homologues américains. On a également établi que de la marihuana est passée en contrebande par les Grands Lacs. Toutefois, en 1999, il y a eu peu de saisies de marihuana aux États-Unis où l'on a pu déterminer que la drogue provenait du Canada. »¹⁷

En 1999, des fonctionnaires de Washington avaient laissé entendre que le Canada pourrait être placé sur la liste des pays soupçonnés de faire preuve de laxisme dans la lutte contre la production et le trafic des drogues. Plus récemment, des fonctionnaires de la *Drug Enforcement Administration* ont répété que le trafic de cannabis du Canada vers les États-Unis représentait un problème significatif. Un agent de la GRC confiait à un journal national qu'environ 70 % de la marijuana cultivée au Canada aboutissait aux États-Unis¹⁸ tandis que le rapport de l'Organe international de contrôle des stupéfiants pour 2000 parlait d'environ 60 %.¹⁹ Nous avons entendu dire, et des agents de la GRC nous ont aussi dit, que le cannabis de Colombie-Britannique avait une telle valeur qu'il s'échangerait au pair avec la cocaïne. En effet, selon ces policiers spécialisés dans la lutte contre les stupéfiants, le cannabis de qualité triple A de Colombie-Britannique vaudrait environ 4 000 \$ la livre au Canada et le kilogramme de cocaïne vaudrait 11 000 \$ US actuellement. Toutefois, le rapport annuel pour 1999, s'il fait allusion à cette supposition, ne la confirme pas :

« La marihuana canadienne est parfois utilisée comme monnaie d'échange pour acheter de la cocaïne entreposée aux États-Unis. Les échanges se font approximativement dans un rapport de 3 contre 1. Des rumeurs d'échange de 1 contre 1 courent, mais aucun cas n'a pu être confirmé. De plus, cette proportion n'est pas logique d'un point de vue commercial sachant qu'un kilo de cocaïne se vend 13 000 \$ US (en chargements de 50 kilos ou plus) alors que le prix de gros d'un kilo de marihuana se situe entre 6 000 \$ US et 8 000 \$ US. D'autres trafiquants canadiens transportent de la marihuana

¹⁶ *Ibid.*

¹⁷ Gendarmerie Royale du Canada (2000) *op. cit.*

¹⁸ National Post, 17 mai 2002. Le Comité note avec intérêt – et un certain amusement – que cet article et un reportage précédent du réseau Global du 13 mai 2002 faisant état des préoccupations de représentants américains, faisaient suite à la publication par le Comité de son Document de discussion.

¹⁹ Organe international de contrôle des stupéfiants (2001) *Rapport de l'Organe international de contrôle des stupéfiants pour 2000*. Disponible en ligne à <http://www.incb.org>

*(en chargements de 20 kilos à 50 kilos) aux États-Unis qu'ils vendent à des acheteurs locaux. Avec les produits de ces ventes, ils achètent de la cocaïne avant de rentrer au pays afin de l'écouler sur le marché canadien. »*²⁰

Quant au rapport annuel de la GRC pour 2002, il se contente de mentionner la pratique de l'échange de cannabis canadien contre la cocaïne, sans préciser s'il s'agit d'un échange poids pour poids. Nous relevons ici aussi une certaine incohérence puisque le kilo de cocaïne est exprimé en dollars US tandis que celui de la marijuana est tantôt en dollars canadiens tantôt en dollars américains.

Au pays, les principaux producteurs sont la Colombie-Britannique, l'Ontario et le Québec. On peut imputer l'importance de la production de la Colombie-Britannique notamment aux conditions climatiques propices. Mais cette explication est courte. Il faut probablement y ajouter des explications d'ordre socio-culturel, la mentalité particulière de la côte pacifique contribuant à expliquer pour partie pourquoi le cannabis semble y avoir pris racine de façon plus significative.

La production de cannabis en Colombie-Britannique aurait augmenté significativement au cours des 10 dernières années, devenant selon certains analystes l'une des industries les plus importantes de la province en termes de sa valeur économique. Certains analystes en chiffrent la valeur à 6 milliards \$, tandis que selon certains policiers, une estimation conservatrice la placerait à hauteur d'environ 4 milliards \$!²¹ Permettons-nous un calcul : si la marijuana se vend 225 \$ l'once, à 16 onces par livres, la Colombie-Britannique produirait l'équivalent de 550 tonnes de cannabis par année, soit plus des deux-tiers de la quantité totale de cannabis circulant en territoire canadien.

Par ailleurs, témoignant devant le Comité spécial lors d'une audience publique à Richmond, C.-B., le 14 mai 2002, le surintendant Clapham de la GRC parlait de l'existence de 15 000 à 20 000 lieux de production illégale de cannabis en Colombie-Britannique (chiffres provenant de la *Drug Enforcement Administration*), tandis que des spécialistes en stupéfiants de la GRC faisaient état le lendemain de 7 000. Quel que soit le nombre le plus près de la réalité, les chiffres, on le voit, doivent nécessairement être pris avec beaucoup de prudence.

Quant aux méthodes de culture, la production en sol demeurerait encore la plus populaire, mais les méthodes de culture plus sophistiquées, hydroponique et aéroponique²² notamment, seraient en expansion, notamment chez les gangs criminalisés disposant de l'infrastructure nécessaire.

« Il arrive souvent qu'on découvre des installations où l'on cultive à l'intérieur plus de 3000 plantes. Bien que les statistiques diffèrent considérablement d'une province à l'autre, dans l'ensemble, moins de 10 % de la marijuana saisie au Canada provient d'une culture hydroponique (méthode selon laquelle les

²⁰ Gendarmerie Royale du Canada (2000) *op. cit.*

²¹ GRC, rencontre privée.

²² Technique où les racines sont suspendues et vaporisées régulièrement avec de l'eau enrichie en matières nutritives, encore très rare et dont il reste à en démontrer l'efficacité. (Source : GRC (2002)).

plantes poussent dans des solutions minérales nutritives plutôt que dans le sol). Si l'on fait encore beaucoup appel aux méthodes de culture organique dans le sol pour les installations intérieures, la culture hydroponique gagne en popularité. Malgré l'existence de technologies de pointe visant à accroître la production, la plupart des cultivateurs de marihuana ne se donnent pas la peine de les utiliser, leur préférant des méthodes plus simples et éprouvées. La marihuana demeure la drogue illicite de choix, tant du point de vue du trafic que de la consommation. On évalue la production annuelle de marihuana à cinq millions de plantes. Étant donné qu'il est relativement peu coûteux de mettre sur pied une culture et que les profits réalisés sont considérables, cette activité est de plus en plus intéressante, même pour les citoyens normalement respectueux des lois. Dans la plupart des régions, les installations d'envergure sont inmanquablement l'œuvre des bandes de motards hors-la-loi, bien que des organisations de souche asiatique jouent un rôle croissant en Colombie-Britannique et en Alberta. De plus en plus de groupes emploient des « garde-récoltes » et autres intermédiaires pour surveiller leurs plantations. Cette approche fait en sorte que la police a du mal à établir des liens entre l'activité et les véritables responsables. Les cultures extérieures sont souvent installées sur des terres publiques, dans des coins isolés, afin de réduire les risques de détection. »²³

Au total, et avec beaucoup de réserves sur la validité des données, le Comité est en mesure de proposer ce qui suit :

	Marijuana	Haschich
Quantité estimée	800 tonnes	100 tonnes
- dont production nationale	environ 50 %	?
Provenance	Production nationale (Colombie-Britannique, Ontario, Québec) Importations : Mexique, Jamaïque	Importation : Pakistan, Afghanistan, Maroc
Valeur (gros)	2 000 à 4000 \$ la livre	?
Valeur détail (once)	225 \$ à 250 \$	325 \$ à 350 \$

PROPRIÉTÉS DU CANNABIS

Classifié en pharmacopée comme hallucinogène, psychodysléptique ou psychotomimétique, le cannabis est un perturbateur ou modulateur, c'est-à-dire qu'il modifie les perceptions et les émotions. Classifié dans les conventions internationales ou dans les législations nationales comme stupéfiant, le cannabis fait partie de la classe des psychotropes qui comprend cinq grands groupes : les dépresseurs (alcool, Valium), les stimulants, mineurs (café, nicotine) et majeurs (cocaïne, amphétamines), les perturbateurs (cannabis, LSD), les médicaments contre les psychoses et les médicaments contre les troubles de l'humeur (lithium).

²³ GRC, *État de la situation au Canada – drogues illicites 1999*.

Plus de 460 constituants chimiques connus sont présents dans le cannabis.²⁴ Parmi eux, plus de 60 sont identifiés sous l'appellation de cannabinoïdes. Le principal ingrédient actif du cannabis, identifié en 1964 par l'équipe du docteur Mechoulam,²⁵ est le Δ^9 -tétrahydrocannabinol communément appelé THC. D'autres cannabinoïdes présents dans le chanvre indien incluent le delta-8-tétrahydrocannabinol, le cannabinol et le cannabidiol mais ils sont présents en faibles quantités et n'exercent pas d'effets significatifs sur le comportement des individus, comparativement au Δ^9 -THC²⁶. Ils peuvent cependant contribuer à moduler l'effet global du produit²⁷. De même, le cannabinol aurait des effets anti-inflammatoires.

Pour mieux saisir les effets du cannabis discutés aux chapitres suivants, il convient de s'arrêter d'abord à ses propriétés pharmacologiques. Ceci étant, le lecteur pourra passer outre cette section technique sans perdre d'information essentielle à la bonne intelligence du reste du rapport. Dans les paragraphes qui suivent, nous discutons d'abord de la teneur en Δ^9 -THC. Ensuite, nous examinons spécifiquement les propriétés pharmacologiques de ce produit.

Concentration en Δ^9 -THC

La teneur en Δ^9 -THC de la marijuana varie généralement dans les conditions naturelles de culture de 0,5 à 4%.²⁸ La teneur en Δ^9 -THC sert en premier lieu à distinguer le type drogue du type fibre : la concentration permise varie selon les pays – au Canada, comme en France, elle est de 0,3 % pour le type fibre. Depuis plus d'une décennie, les techniques de sélection de souches puissantes et de culture (en serre ; hydroponique) ont permis d'atteindre des concentrations en Δ^9 -THC de 15 % et plus. La teneur en Δ^9 -THC sert aussi à distinguer entre eux divers produits du cannabis et par

²⁴ Voir notamment Grinspoon, L., et J.B. Bakalar (1997) *Marijuana. The forbidden medicine*. New haven and London : Yale University Press; Clark, P.A. (2000) « The ethics of medical marijuana : government restrictions vs. Medical necessity. » *Journal of Public Health Policy*, 21, pages 40-60 ; ainsi que Wheelock (2002) *op. cit.* pour le Comité du Sénat.

²⁵ Gaoni, Y et R. Mechoulam (1964) « Isolation, structure and partial synthesis of an active constituent of hashish. » *Journal of the American Chemistry Society*, 86, pages 1646-1647 ; et Mechoulam, R. et Y. Gaoni (1965) « A total synthesis of delta-9-tetrahydrocannabinol, the active constituent of hashish. » *Journal of the American Chemistry Society*, 87, pages 3273-3275.

²⁶ Smith, D.E. (1998) « Review of the American Medical Association Council on Scientific Affairs Report on Medical Marijuana. » *Journal of Psychoactive Drugs*. 30, pages 127-136 ; McKim W.A. (2000) « Cannabis ». in McKim, W.A. (ed.) *Drugs and Behavior. An introduction to behavioral pharmacology*. Upper Saddle River ; prentice Hall.

²⁷ Ashton, C.H. (2001) « Pharmacology and effects of cannabis : a brief review. » *British Journal of Psychiatry*. 178, pages 101-106.

²⁸ Huestis, M.A et coll. (1992) « Characterization of the absorption phase of marijuana smoking. » *Clinical Pharmacology and Therapeutics*, 52, pages 31-41.

là leur prix : le sinsemilla par exemple, aura une teneur variant généralement entre 7 % et 14 % et sera plus dispendieux que le cannabis « ordinaire ».

La question de la teneur en Δ^9 THC, de sa variabilité, de ses modes de détermination et de ses effets soulève de nombreux débats. Si tous les spécialistes s'entendent pour dire que les concentrations maximales en principe actif ont augmenté au cours des vingt dernières années, les avis sont partagés sur les concentrations moyennes du cannabis disponible sur le marché. La concentration du delta-9-tétrahydrocannabinol fait l'objet d'estimations variables tant en termes de sa prépondérance qu'en termes de ses conséquences.

Il faut d'abord souligner que les études montrent une variabilité extrême des concentrations. On peut citer plusieurs raisons à cet état de fait. Premièrement, à défaut d'un système de contrôle à la source, la teneur en Δ^9 THC de la marijuana est estimée à partir des saisies faites par la police. Or, seule une partie des saisies font l'objet d'analyses pour leur teneur en THC,²⁹ et les analyses ne sont pas toutes aussi fiables entre elles, selon la manière dont les saisies auront été faites par les policiers ou les douaniers et les produits conservés et transportés au laboratoire d'analyse. De plus, entre le produit saisi dans un laboratoire clandestin ou à une entrée douanière et le produit vendu sur la rue, il peut se glisser plusieurs transformations : au gramme de « pot » vendu à l'école, auront été ajoutés du tabac, des herbes, d'autres produits qui en modifient la nature et donc la quantité de principe actif. C'est encore plus vrai pour le haschich, comme on l'a vu plus haut sur l'exemple de la transformation au Maroc.

Deuxièmement, comme il s'agit d'un produit illégal et largement répandu, il est impossible de constituer un échantillon représentatif du cannabis disponible à un moment donné sur le marché pour en faire l'analyse. Il est ainsi impossible de mesurer l'écart entre le contenu en Δ^9 THC du cannabis saisi au lieu de production ou de livraison et du cannabis consommé par les particuliers. Et troisièmement, la concentration en produit actif varie selon l'aire géographique de provenance, les conditions climatiques et les conditions de production. Il circule vraisemblablement sur le marché, à un même temps donné, une variété importante de produits du cannabis qui reflètent la diversité des conditions sous lesquelles ils ont été produits. Il s'ensuit que deux échantillons saisis à Vancouver la même semaine pourraient avoir des concentrations très différentes, de même que des échantillons saisis la même semaine à Vancouver, Montréal et St-John's.

Le Comité a entendu des experts lui indiquer que le cannabis sur le marché canadien avait une puissance relative 700 % supérieure à celui des années 1970.

²⁹ Notons par exemple qu'il n'existe aux États-Unis même aucun système systématique de mesure du THC. Comme le souligne une analyse comparative de l'évolution des prix de l'héroïne, de la cocaïne et de la marijuana, « Another problem is that the DEA does not test marijuana for THC content, so there is no marijuana counterpart to the pure grams reported for cocaine and heroin. The difficulty this causes is the STRIDE data provide no basis for adjusting price changes for marijuana's quality. » Abt Associates (2001) *The Price of Illicit Drugs: 1981 through the Second Quarter of 2000*. Washington, DC. Report prepared for the Office on National Drug Control Policy.

Certains ont suggéré que la teneur moyenne en Δ^9 THC du cannabis sur le marché serait d'environ 30 %, comparativement aux 3 % à 4 % de celui des années 70.

« Le cannabis consommé à l'heure actuelle a une teneur en THC qui oscille entre 5 % et 31 % soit jusqu'à cinq fois plus que le cannabis que la plupart des adultes ont connu dans les années 60 et 70. »³⁰

Dans son rapport annuel pour 1999, la Gendarmerie Royale du Canada indiquait un contenu moyen de 6 % pour les saisies.³¹ Au Québec, le Service de police de la Ville de Montréal a affirmé que la teneur en THC du cannabis saisi serait maintenant à 25 %. D'autre part, à l'occasion d'une rencontre privée avec des Membres du Comité, des experts en stupéfiants de la GRC en Colombie-Britannique ont souligné qu'il est *impossible en l'état actuel des choses, de connaître la teneur moyenne du cannabis au pays* ou dans une province donnée, notamment en raison de l'extrême variabilité des saisies et des modes d'analyse. En effet, les agents qui font les saisies ne font pas toujours attention à la façon dont ils conservent le produit, de sorte qu'il peut perdre de sa teneur en Δ^9 THC : la chaleur, la lumière, le taux d'humidité, affectent en effet la stabilité du cannabis. Enfin, les experts fournissant le cannabis aux fins thérapeutiques que nous avons rencontrés mentionnent qu'ils conservent des grades différents de cannabis, notamment selon la concentration en Δ^9 THC, et que dans certains cas, les produits offerts aux patients atteignent une concentration de 27 %.

Les études les plus exhaustives sur l'évolution de la concentration en Δ^9 THC du cannabis ont été réalisées en Australie, aux Pays-Bas, en France et aux États-Unis. On constate d'abord qu'à côté des formes traditionnelles de cannabis sont apparues sur le marché des produits plus puissants : la « skunk » (variété originaire des États-Unis et des Pays-Bas), la « super-skunk » et le « pollen » (étamines des plants mâles). Le Canada n'est pas en reste, avec le *BC Bud* et le *Quebec Gold* notamment.

De manière spécifique, les études sur les concentrations en Δ^9 THC révèlent des tendances similaires :

- En Australie, une étude de Wayne et Wendy sur 31 000 saisies effectuées entre 1980 et 1997 constate que le contenu moyen en THC a peu changé sur l'ensemble de la période, se situant dans une fourchette entre 0,6 % et 13 %. Il en ressort que la principale évolution consistait en une sélection plus importante qu'auparavant des parties de la plante les plus fortement

³⁰ Témoignage de Michael J. Boyd, président du Comité sur la toxicomanie et Directeur adjoint du Service de police de Toronto, pour l'Association canadienne des Chefs de police, Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, fascicule no 14, page 74.

³¹ Gendarmerie royale du Canada (1999) *Rapport annuel*.

titrées.³² Les auteurs de cette étude observent ce qui suit et qui, selon nous, s'applique tout aussi bien au Canada ::

[Traduction] « Pourquoi continue-t-on, en l'absence de données, à croire que la puissance du cannabis a été multipliée par 30 en Australie ? Divers facteurs expliquent selon nous cette croyance. Premièrement, ceux qui avancent cette affirmation se basent souvent sur des rapports provenant d'un échantillon contenant un taux particulièrement élevé de THC testé par la police. Dans le meilleur des cas, un tel échantillon révèle le contenu en THC maximal atteint (à supposer qu'il n'y ait pas d'erreur de mesure) mais il ne nous dit rien du cannabis généralement consommé. Deuxièmement, les biais dans l'échantillonnage du cannabis testé sont amplifiés par les médias qui donnent l'impression que le cannabis à niveau de THC élevé est la norme. Troisièmement, la répétition non contestée de ces affirmations dans les médias finit par les établir comme des « faits », et ceux qui les contestent doivent prouver qu'ils sont faux plutôt que de demander à ceux (le plus souvent anonymes) qui les ont avancés de les démontrer. Et quatrièmement, cette augmentation du contenu moyen en THC expliquerait l'augmentation apparente du nombre d'usagers de cannabis qui ont des problèmes de consommation. »³³

- Aux Pays-Bas, le *Drug Information Monitoring System* de l'Institut Trimbos a mené depuis 2000 diverses études sur le contenu moyen en Δ^9 THC. La variété locale, le *Nether-Weed* contenait en moyenne 8,6 % de THC en 2000 et 11,3 % en 2001, tandis que les variétés importées étaient stables à environ 5 %. L'une des raisons invoquées pour expliquer cette différence était que la variété locale était plus fraîche et contenait un ratio plus faible de cannabinoles par rapport au Δ^9 THC. De plus, le *Nether-Weed* ressemble au *sinemilla* qui provient des fleurs non fertilisées de la plante femelle et est cultivé sous serre.
- En France, le rapport Roques faisait état de concentrations pouvant atteindre 20 % dans le cas de certaines variétés hydroponiques néerlandaises.³⁴ De son côté, le récent rapport de l'Institut national de la santé et de la recherche médicale en France rapporte une étude toxicologique menée par Mura sur la concentration en Δ^9 THC de saisies depuis 1993. Sur la période 93-95, la moyenne pour l'herbe était de 5,5 % alors que depuis 1996 la moyenne est d'environ 8 % avec des pics pouvant atteindre 22 %.³⁵ Au cours de l'année 2000, 3 % des échantillons de marijuana analysés contenaient plus de 15 % de Δ^9 THC.
- Enfin, aux États-Unis, les données pour 2000 indiquent une concentration moyenne de 6 %, comparativement à 4,1 % en 1997. En

³² Wayne, H. et S. Wendy (2000) « The THC content of cannabis in Australia : evidence and implications. » *Australian and New Zealand Journal of Public Health*. 24, pages 503-508.

³³ *Ibid.*, page 504.

³⁴ Roques, B. (1999) *La dangerosité des drogues*. Paris : Odile Jacob.

³⁵ INSERM (2001) *Cannabis : quels effets sur le comportement et la santé?* Paris : Les Éditions Inserm.

fait, rappelant une étude menée récemment au Mississippi, le Dr John Morgan a dit ce qui suit :

« (...) malgré tout l'émoi suscité par la forte augmentation de la puissance de la marijuana, on remarquera avec intérêt que la puissance de la variété commerciale vendue aux États-Unis n'a guère varié depuis 30 ans. On l'évalue par l'analyse du contenu en THC dans les stocks saisis par la police. J'ai récemment consulté le rapport qui vient du Mississippi et selon lequel la teneur moyenne en THC des quelque 40 000 saisies effectuées depuis 1974 est d'environ 3,5 %. Elle augmente depuis 10 ans, pour atteindre une moyenne arithmétique de 4 %, je crois, alors qu'au cours de la décennie précédente, la moyenne était d'environ 3,5 %. »³⁶

Le tableau suivant résume quelques-unes des données sur une base historique pour certains pays.

Année d'analyse	Marijuana domestique (USA)			Sinsemilla (USA)		
	Marijuana étrangère (Pays-Bas)			Nether-Weed (Pays-Bas)		
	= 3 %	= 5 %	= 9 %	= 3 %	= 5 %	= 9 %
USA, 1996 ¹	63 %	25 %	3 %	93 %	77 %	49 %
USA, 1997 ¹	63 %	29 %	6 %	96 %	85 %	64 %
USA, 2000 ²	Moyenne de 6,07 % (DEA)			Moyenne de 13,65 % (DEA)		
Pays-Bas, 2000-2001 ¹	75 %	48 %	7 %	93 %	87 %	35 %
Pays-Bas, 2001-2002 ¹	80 %	55 %	4 %	100 %	99 %	78 %
Australie, 1997 ³	Entre 0,6 % et 13 %					
Australie de l'Ouest	Moyenne de 3,8 %					
Canada 1999 ⁴	Moyenne de 6 %			Non disponible		

- (1) Source : Riger H. et M. von Laar (2002) « Epidemiological Aspects of Cannabis Use » International Scientific Conference on Cannabis, Brussels, p : 32.
 (2) Drug Enforcement Administration, <http://www.usdoj.gov/dea/concern/marijuana.html>
 (3) Source : Hall, W. et W. Swift (2000) *op. cit.*, page 505.
 (4) Source : GRC, Rapport annuel pour 1999.

En somme, il semble que le principal changement serait dans les concentrations maximales obtenues suite à la sophistication des croisements et des modes de culture, tandis que les concentrations moyennes n'auraient pas changé significativement au cours des trente dernières années³⁷. Que faut-il en conclure ? Pour certains, si l'on pouvait encore parler du cannabis comme d'une « drogue douce » dans les années 1970, ce n'est plus le cas aujourd'hui. Certains n'hésitent pas à en faire une drogue comparable à l'héroïne ou à la cocaïne quant à sa puissance addictive. À titre

³⁶ Dr John Morgan, professeur à la City University of New York Medical School, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule no 4, page 29.

³⁷ ElSohly, M.A., et coll. (2000) « Potency trends of delta9-THC and other cannabinoids in confiscated marijuana from 1980-1997. » *Journal of Forensic Sciences*, 45(1), pages 24-30.

d'exemple, l'Association canadienne des policiers et policières a émis cet avis sur les risques associés au cannabis.

« D'une façon générale, la marijuana (cannabis) et ses dérivés sont décrits comme des drogues douces pour les différencier des préjudices connus associés aux autres drogues illicites. Cette approche, en dépit de ses dangers, fonctionne et contribue à l'incompréhension, à la désinformation et à l'accroissement de la tolérance à l'égard de sa consommation. La marijuana est une drogue puissante aux effets variés. (...) La consommation de marijuana est associée à la médiocrité au travail et en classe de même qu'aux problèmes d'apprentissage chez les jeunes. Elle est internationalement reconnue comme drogue d'introduction. Ses facteurs de risque d'assuétude sont comparables à ceux des autres formes de toxicomanie. »³⁸

D'autres, associent l'augmentation de la demande de traitement pour dépendance au cannabis à l'augmentation en concentration de produit actif. Ainsi, cet article du National Post :

[Traduction] « La variété puissante de BC Bud, dont le contenu en THC s'élève jusqu'à 25 % comparativement au 2 % des années 1970 génère des inquiétudes pour la santé aux États-Unis. Les admissions pour traitement de dépendances à la marijuana dans l'état de Washington surpassent maintenant celles pour le traitement de l'alcoolisme. En Illinois, pour le seul Cook County, les admissions ont augmenté de 400 % au cours de la dernière année. »³⁹

Peut-on dire que le cannabis est effectivement devenu une drogue «dure» au même titre que la cocaïne et l'héroïne ? Au delà de la validité des effets du cannabis lui-même tels que les décrit l'Association des policiers et dont il sera question en détail au prochain chapitre, pareille affirmation ne tient pas compte des modes d'usage ni non plus de l'absence de connaissance quant aux effets de la concentration en Δ^9 THC. Des études sur les modes d'usage dont il sera question au chapitre 6 démontrent en effet que les usagers réguliers semblent préférer un cannabis moyen à doux, et qu'ils ajustent leur consommation à la force. Les entretiens avec des personnes utilisant le cannabis à des fins médicales tendent d'ailleurs à confirmer cette perception. De manière plus importante, on ne sait tout simplement pas quels sont les effets d'une concentration plus élevée en Δ^9 THC faute d'études spécifiques sur cette question. Enfin, comme le montrera la section suivante, la bio-disponibilité du Δ^9 THC, c'est-à-dire la proportion qui est effectivement absorbée par l'organisme suite à la combustion, est très variable. Comme le souligne le rapport de l'Organisation mondiale de la santé (OMS) sur le cannabis, si l'on tient compte de l'ensemble de ces facteurs, la quantité réelle de THC

³⁸ Sergent Dale Orban, Police de Regina, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 28 mai 2001, fascicule...

³⁹ National Post, 17 mai 2002.

absorbée par l'usager de cannabis est difficile à estimer.⁴⁰ En somme, si la question de la teneur en Δ^9 THC doit effectivement nous préoccuper, elle soulève probablement bien plus notre capacité à la contrôler et à en mieux connaître les effets qu'à justifier l'expression de tout et n'importe quoi.

Pharmacocinétique⁴¹

Après inhalation, et selon la manière de fumer et l'expérience du fumeur, entre 15 % à 50 % du Δ^9 THC présent dans la fumée est absorbé et passe dans le flux sanguin. La proportion est dépendante aussi de la concentration en Δ^9 THC dans le produit fumé. Cette absorption est très rapide, les concentrations sanguines maximales sont obtenues moins de 15 minutes après le début de l'inhalation. Les effets ressentis presque immédiatement après avoir absorbé la fumée diminuent graduellement au cours des 60 minutes suivantes, et durent généralement un maximum de trois heures après inhalation. Autrement dit, la teneur en THC dans le plasma sanguin est la plus élevée immédiatement suite à l'absorption, tandis que les effets maxima se font ressentir environ 30 à 40 minutes plus tard. Le tableau suivant, reproduit de l'expertise collective de l'INSERM, indique le temps d'apparition et la durée de détection des cannabinoïdes dans le sang.⁴²

Concentration, temps d'apparition¹ et durée de détection² des cannabinoïdes dans le sang après consommation d'une cigarette de marijuana contenant 15,8 mg ou 33,8 mg de Δ^9 THC

Composé	Concentration maximale	Temps d'apparition du pic (h)	Durée de détection (h)
Δ^9 THC	84,3 (50-129) ³	0,14 (0,10-0,17)	7,3 (3-12)
	162,2 (76-267) ⁴	0,14 (0,08-0,17)	12,5 (6-27)
11-OH- Δ^9 THC	6,7 (3,3-10,4)	0,25 (0,15-0,38)	4,5 (0,54-12)
	7,5 (3,8-16,0)	0,20 (0,15-0,25)	11,2 (2,2-27)
Δ^9 THC-COOH	24,5 (15-54)	2,43 (0,8-4,0)	84,0 (48-168)
	54,0 (22-101)	1,35 (0,54-2,21)	152,0 (72-168)

- (1) intervalle moyen entre le début de la consommation et l'apparition d'un pic de concentration
- (2) intervalle moyen entre le début de la consommation et le moment où la concentration la plus faible du composé est détectée (> 0,5 ng/ml)
- (3) cigarette contenant 13,8 mg (1,75 %) de Δ^9 THC
- (4) cigarette contenant 33,8 mg (3,55 %) de Δ^9 THC

⁴⁰ World Health Organization (1997) *Cannabis : a health perspective and research agenda*. Geneva : WHO, 1997. En ligne à l'adresse : www.who.org

⁴¹ Cette section s'inspire largement du rapport de l'INSERM (2001) *op. cit.*, du rapport de la Conférence scientifique internationale : Pelc, I., (2002) *op. cit.*, et du travail de synthèse réalisé par Wheelock (2002) *op. cit.*, pour le Comité.

⁴² INSERM (2001) *op. cit.*, page 340.

La biodisponibilité du Δ^9 THC est plus lente et plus faible lorsqu'il est ingéré par voie orale (biscuits, gâteaux, tisanes) : environ 4 % à 12 % ; plus lents à se faire sentir et de qualité différente, ses effets seront cependant plus durables.

Au total, on ne connaît pas l'interaction entre les effets du THC (concentration) et des facteurs personnels (manière de fumer ; condition de santé ; alcoolisme ou prise de médicaments). Il est cependant probable qu'une même concentration en THC n'a pas le même effet sur tous les fumeurs, ce que tendrait d'ailleurs à confirmer la plasticité du cannabis au flux hormonal (voir infra).

Le Δ^9 THC est très lipophile et se distribue rapidement dans tous les tissus riches en lipides, dont le cerveau. Il est aussi caractérisé par un cycle entéro-hépatique et une réabsorption rénale qui se traduisent par la persistance de ses effets. Dans une étude sur simulateur de conduite, on a trouvé une corrélation linéaire significative jusqu'à 7 heures suivant l'absorption, notamment sur le suivi de trajectoire.

Le Δ^9 THC subit un métabolisme oxydatif conduisant à la production de divers composés, notamment le 11-hydroxy-tétrahydrocannabinol (11-OH Δ^9 THC) métabolite psychoactif qui, transporté par l'albumine, tandis que le Δ^9 THC est principalement lié aux lipoprotéines, a une pénétration plus importante dans le cerveau que celle du Δ^9 THC ; le 8 β -hydroxy- Δ^9 -tétrahydrocannabinol, potentiellement psychoactif mais dont la participation serait négligeable ; et divers autres composants non connus pour être psychoactifs. En plus des éléments potentiellement psychoactifs, le cannabis renferme environ 200 produits dérivés de la combustion et de la pyrolyse, comparables à ceux que l'on trouve dans le tabac mais dont certains à fort pouvoir cancérogène seraient plus concentrés dans la fumée du cannabis que dans celle du tabac.

L'élimination des cannabinoïdes s'effectue par différentes voies : digestive, rénale et sudorale. Environ 15 % à 30 % du Δ^9 THC sanguin est éliminé dans les urines, tandis que 30 % à 65 % l'est par les selles. En raison de sa forte fixation tissulaire, le Δ^9 THC est éliminé lentement par les urines : chez des gros consommateurs réguliers, des urines présentent des traces de Δ^9 THC-COOH 27 jours après arrêt de la consommation.

Les consommateurs réguliers métabolisent le Δ^9 THC jusqu'à deux fois plus rapidement que les consommateurs n'ayant jamais consommé auparavant. Une étude a notamment démontré qu'une administration intraveineuse de 5mg de Δ^9 THC conduisait à des concentrations sanguines plus élevées chez les consommateurs réguliers que chez les occasionnels.⁴³

Les cannabinoïdes agissent sur l'organisme par l'intermédiaire du système cannabinoïde endogène, composé de substances neurochimiques (ligands endogènes) et de récepteurs spécifiques. Les effets comportementaux et centraux du cannabis sont dus aux actions agonistes de ses principes actifs (en particulier le Δ^9 THC, cannabinoïde

⁴³ Cité in INSERM (2001) *op. cit.*, page 148.

exogène) sur les récepteurs des cannabinoïdes endogènes (anandamide, 2-arachidonoylglycérol) présents dans les tissus nerveux du cerveau.

Bien que la structure chimique du Δ^9 THC ait été identifiée dès 1964 par Mechoulam⁴⁴ ce n'est que tout récemment que l'on a identifié les caractéristiques et la localisation du système cannabinoïde endogène.⁴⁵ Deux types de récepteurs cannabinoïdes ont été isolés : CB1 en 1990⁴⁶ et CB2 en 1993.⁴⁷ CB1 est principalement exprimé dans le système nerveux central et périphérique. CB2 est exprimé essentiellement dans les cellules du système immunitaire. Il suit de cette distribution que CB1 est essentiellement impliqué dans les effets psychotropes et CB2 dans les effets immunomodulateurs.

Les principaux endocannabinoïdes sont l'arachidonoyléthanolamide (aussi appelé anandamide – mot dérivé du sanscrit qui signifie littéralement félicité) et le 2-arachidonoylglycérol (2-AG). Ce sont les deux seules molécules endogènes connues capables de se lier aux récepteurs cannabinoïdes CB1 et CB2 et de mimer les effets pharmacologiques et comportementaux du Δ^9 THC. Les niveaux d'anandamide dans le cerveau sont comparables à d'autres neurotransmetteurs tels que la dopamine ou la sérotonine. Les plus hauts niveaux correspondent aux zones de forte expression de CB1, c'est-à-dire l'hippocampe, le striatum, le cervelet ou le cortex. Le 2-AG, tout comme l'anandamide, reproduit tous les effets comportementaux du Δ^9 THC ou de l'anandamide mais ses actions sont moins puissantes que celles du Δ^9 THC ou de l'anandamide.

Les récepteurs CB1 sont parmi les récepteurs neuronaux les plus abondants du système nerveux central et leur distribution est remarquablement bien corrélée aux effets comportementaux des cannabinoïdes sur la mémoire, la perception sensorielle et le contrôle des mouvements, comme le démontre le tableau suivant.

⁴⁴ Guoli et Mechoulam (1964) *op. cit.*

⁴⁵ Devane, W.A. et coll. (1992) «Isolation and structure of a brain constituent that binds to the cannabinoid receptor » *Science*, 258 (5090) pages 1946-1949.

⁴⁶ Matsuda, L.A. et coll.. (1990) « Structure of a cannabinoid receptor and functional expression of the cloned DNA » *Nature*, 346(6284) pages 5561-5564.

⁴⁷ Munro, S. et coll. (1993) «Molecular characterization of a peripheral receptor for cannabinoids. » *Nature*, 365, pages 61-65. Notons qu'une conférence scientifique récente du National Institute on Drug Abuse aux États-Unis rapportait les travaux de chercheurs faisant l'hypothèse qu'il y aurait des récepteurs additionnels et d'autres ligands. Ceux-ci n'ont pas encore, à notre connaissance, été formellement identifiés par la recherche.

Localisation des récepteurs CB1 dans le SNC et effets pharmacologiques corrélés⁴⁸

Structures	Marquage	Conséquences physiologiques	Références
Cerveau antérieur			Herkenham et coll. 1990
Amygdale	+		Herkenham, 1992
Systèmes olfactifs	+		Tsou et coll. 1998, 1999
Cortex cérébral	++	Effets cognitifs	Katona et coll. 1999
Noyaux de la base	++	Effets locomoteurs	Rinaldi-Carmona et coll.
Hippocampe	++	Effets cognitifs (inhibition mémoire à court terme) et action anticonvulsivante	1996
		anticonvulsivante	Matsuda et coll. 1990, 1993
Thalamus/hypothalamus	+	Effets endocriniens et antinociceptifs	Hohmann, 1999
			Marsicano et Lutz, 1999
			Westlake et coll. 1994
Cerveau médian	-		
Noyau gris	-		
Collicules	-		
Noyaux optiques	-		
Substances noires/aire tegmentale ventrale	-		
Cerveau postérieur			
Aire périaqueducule grise	+	Effets antinociceptifs	
Locus coeruleus	-		
Raphé	-		
Noyau ponté	-		
Tronc cérébral	-	Pas de dose létale, pas de mortalité aiguë	
Cervelet	++	Effets moteurs (équilibre)	

++ : marquage abondant ; + : marquage intermédiaire ; - : marquage faible ou nul.

Cette concentration des récepteurs CB1 explique largement les effets du Δ^9 THC. Ainsi, l'intense expression des récepteurs CB1 dans le noyau de la base et la couche moléculaire du cervelet est en accord avec les effets inhibiteurs des cannabinoïdes sur les performances psychomotrices et la coordination motrice. Leur expression dans le cortex et l'hippocampe est en accord avec la modulation des formes élémentaires d'apprentissage, expliquant notamment les effets délétères réversibles sur la mémoire à court terme et les fonctions cognitives. Leur absence de marquage au niveau du tronc cérébral explique l'absence de toxicité aiguë ou de dose létale des dérivés du cannabis. Les récepteurs CB1 dans le système thalamocortical participent aux perturbations sensorielles et aux propriétés analgésiques du cannabis. De même, la présence de récepteurs dans l'aire périaqueducule et la corne dorsale de la moelle épinière participe à son pouvoir antinociceptif.

Notons aussi que les récepteurs CB1 n'ont pas qu'un rôle inhibiteur des fonctions cérébrales. En raison d'effets de circuit, les cannabinoïdes peuvent provoquer l'excitation de certaines populations neuronales, notamment l'activation des cellules dopaminergiques de la voie mésolimbique. Couplée au constat que le traitement

⁴⁸ Tableau reproduit de INSERM (2001), *op. cit.* page 298.

prolongé au cannabis (à des doses correspondant il est vrai à l'équivalent de 575 cigarettes de cannabis par jour !) semble induire des modifications adaptatives durables du système nerveux central, et à la relation positive entre les cannabinoïdes et les hormones du stress (corticotrophine), cette observation permet d'induire les difficultés (irritabilité, troubles du sommeil, etc.) constatées chez des utilisateurs réguliers lors de la cessation de la prise de cannabis. Nous y reviendrons au chapitre 7 lors de la discussion sur la tolérance et la dépendance au cannabis.

Notons enfin que des travaux récents suggèrent la présence d'importantes variations interindividuelles des effets des cannabinoïdes selon les hormones sexuelles stéroïdiennes chez les mâles et les femelles : il semble que les effets des cannabinoïdes exogènes et endogènes puissent être modulés par l'état hormonal de chaque individu et que, en retour, les récepteurs CB1 et endocannabinoïdes soient capables de réguler l'activité hormonale.

Ainsi que l'avait constaté le rapport de l'OMS en 1997, des questions de recherche demeurent sans réponse, notamment comment et dans quelle mesure l'utilisation de cannabis modifie le système cannabinoïde endogène et quelle est la relation entre les niveaux de cannabinoïdes dans le plasma sanguin et les effets comportementaux induits.

CONCLUSIONS

En conclusion, le Comité retient ce qui suit :

Conclusions du Chapitre 5

Sur la production

- On estime qu'il circulerait environ 800 tonnes de cannabis au Canada chaque année.
- La production nationale de cannabis a significativement augmenté et on estime qu'environ 50 % du cannabis circulant au pays est de production endogène.
- Les principales provinces productrices sont la Colombie-Britannique, l'Ontario et le Québec.
- Les estimations de la valeur du marché ne sont pas fiables. Ainsi s'il se produit 400 tonnes de cannabis au Canada chaque année, au prix de revente sur la rue à 225 \$ l'once, la valeur totale pour le Canada serait de moins de 6 milliards, soit moins que l'estimation policière pour la seule Colombie-Britannique.
- Une partie inconnue de la production nationale est exportée aux États-Unis.
- Une partie de la production est contrôlée par des éléments appartenant au milieu du crime organisé.

Sur le THC

- Le THC est le principal composant actif du cannabis ; à l'état naturel, le cannabis contient entre 0,5 et 3 % de THC.
 - Des méthodes de culture sophistiquées et les progrès de la génétique ont permis l'augmentation du contenu en THC au cours des dernières années mais il est impossible d'estimer le contenu moyen du cannabis disponible sur le marché ; il est permis de penser que le contenu des cultures varie entre 6 % et 31 %.
 - Le THC est très liposoluble et se répand rapidement dans les tissus innervés du cerveau ; il atteint un pic dans le plasma sanguin en moins de 9 minutes et il n'en reste qu'environ 5 % après une heure.
 - L'élimination du THC par l'organisme est lente et les métabolites inactifs du THC peuvent être détectés dans les urines jusqu'à 27 jours après consommation dans le cas des usagers réguliers.
 - Les effets psychoactifs durent en général de 2 à 3 heures après consommation et jusqu'à 5 à 7 heures.
-

CHAPITRE 6

USAGERS ET USAGES :

FORMES, PRATIQUES, CONTEXTES

Qui sont les usagers de cannabis ? Comment les tendances d'usage au Canada se comparent-elles avec celles d'autres pays ? Dans quels contextes utilise-t-on le cannabis ? Et pourquoi ? Quelles sont les populations les plus vulnérables ? Quelles sont les conséquences sociales du cannabis, notamment sur la délinquance et la criminalité ? Et surtout, quelles sont les trajectoires des usagers de cannabis, notamment eu égard au passage éventuel vers d'autres drogues ?

On peut difficilement établir une politique sur une substance sans répondre au moins partiellement à ces questions. Si l'on veut prévenir, encore faut-il savoir ce que l'on veut prévenir et quels sont les groupes cibles visés. Si l'on veut soutenir ceux qui présentent une consommation à problème, il faut au moins avoir une idée de la composition et de la taille de ce groupe. Plus loin, lorsqu'on voudra des indications qu'une politique publique diminue l'usage ou réduit les usages à risque, on voudra connaître l'évolution des tendances d'usage dans la population.

Or, la situation au Canada eu égard aux connaissances sur les tendances d'usage et les divers contextes d'usage du cannabis est à peu de choses près désastreuse. Alors que les USA, le Royaume-Uni et l'Australie ont mis en place, depuis le début des années 1980, des systèmes d'observation en population générale et en population étudiante menant à des rapports annuels sur les tendances (USA) ou bisannuels (Royaume-Uni et Australie), tandis que plusieurs pays européens se sont dotés, depuis les cinq dernières années, de systèmes de connaissance autour de l'Observatoire européen des drogues et des toxicomanies (OEDT), le Canada n'a mené que deux enquêtes épidémiologiques spécifiques aux drogues en population générale (1989 et 1994) et seules certaines provinces mènent des enquêtes en population étudiante, encore qu'avec des méthodes et des instruments différents réduisant ainsi la comparabilité des données. De surcroît, tout donne à penser qu'il se fait peu d'études sociologiques ou anthropologiques sur les modes et contextes d'usages des drogues illicites, spécifiquement du cannabis. À tout le moins, peu de travaux ont été portés à notre attention. Il s'ensuit que notre bassin de connaissances sur les usagers et les usages est restreint à sa plus petite expression.

Nous n'avons pas d'explications à cette situation. Du moins pas d'explications satisfaisantes. Dès les années 70 le Canada aurait pu, dans les suites des travaux de la Commission Le Dain, se doter d'un système d'observation des tendances. Dans les années 80, dans le contexte de l'adoption de la Stratégie canadienne antidrogues, à laquelle le gouvernement fédéral consacrait 210 millions \$ sur cinq ans, un système de collecte d'informations de base aurait pu être créé. Faut-il invoquer l'absence de leadership et de vision ? La peur de connaître ? Les partages de compétences entre les niveaux de gouvernements ? L'absence d'une culture de la recherche socio-légale au sein des ministères responsables de la justice et de la santé ? Probablement un peu de tout et autre chose encore. Quoi qu'il en soit, nous affirmons que cette situation est proprement inacceptable et qu'elle devrait faire l'objet de correctifs rapides et forts. Il nous faudra donc utiliser les maigres données disponibles, ce qui signifie au total bien peu de données. Surtout, peu de données comparables. Nous recourrons aussi à des études et données provenant d'autres pays.

Ce chapitre se divise en quatre sections. La première section porte sur les tendances de consommation, d'abord en population générale, puis spécifiquement chez les jeunes (12 à 18 ans), et compare ensuite les tendances entre divers pays. La deuxième section examine ce que l'on connaît des motifs et modalités d'usage ; il y sera aussi question des origines et différences culturelles entre les usages. La troisième section porte spécifiquement sur les trajectoires des usagers de cannabis, examinant entre autres la question de l'escalade. Enfin, la quatrième section traite des relations entre usage de cannabis et délinquance et criminalité.

TENDANCES D'USAGE

Les enquêtes épidémiologiques sont le principal moyen de mesurer les tendances de la consommation ; elles sont menées en population générale (le plus souvent les 15 ans et plus) et auprès de populations spécifiques, le plus souvent les jeunes en milieu scolaire. La plupart des enquêtes épidémiologiques en population générale procèdent par sondage téléphonique sur la base d'un questionnaire validé. Dans certains cas, elles utilisent l'entretien en face à face. Enfin, certaines enquêtes en milieu scolaire procèdent à partir d'un questionnaire remis aux étudiants en classe.

Parce que la consommation de drogues illicites en population générale est faible, les échantillons doivent nécessairement être grands (au Canada, plus de 12 000 répondants). Quelle que soit la taille de l'échantillon, ces enquêtes sous-estiment inévitablement la consommation : soit parce que les répondants la sous-rapportent, soit en raison de l'interdit légal faisant en sorte que les personnes refusent tout simplement de répondre, soit encore parce que certaines personnes à risque ne seront pas rejointes lors d'une enquête téléphonique. Ajoutons enfin les biais de mémoire : plus il se passe de temps entre la consommation et le moment où est

réalisée l'enquête, moins précis seront les souvenirs relatifs aux moments, circonstances et quantités impliqués.

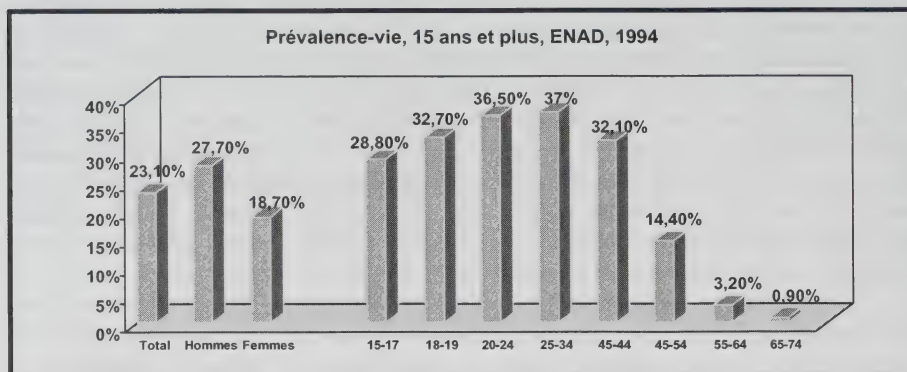
Par ailleurs, notons que certains rapports, dont le rapport de l'INSERM ainsi que le *Profil canadien* du Centre canadien de lutte contre l'alcoolisme et les toxicomanies (CCLAT), rapportent aussi les données des saisies par la police et les douanes au titre d'indicateurs indirects de l'usage. Nous faisons plutôt le choix de rapporter les données sur les saisies et autres activités policières et douanières au chapitre 14. En effet, nous sommes d'avis que ces données reflètent peu et mal les usages et qu'elles sont plutôt des indicateurs de l'activité policière en matière de drogues et pour partie de l'état du marché.

Les enquêtes ne mesurent pas toutes les phénomènes de la même manière, bien que l'on assiste, ces dernières années, à un effort important d'arriver à une plus grande comparabilité. Généralement, on mesure la prévalence-vie, c'est-à-dire le fait d'avoir consommé une substance au moins une fois au cours de sa vie. On distingue cette consommation épisodique ou expérimentale de la consommation au cours de la dernière année. Les mesures de la consommation fréquente, au cours du dernier mois par exemple, sont plus rarement recherchées. Quant aux consommations excessives, elles sont encore moins souvent recherchées. De surcroît, quand il s'agit des consommations régulières, les études ont plutôt tendance à utiliser des critères de dépendance – que nous décrivons en détail au chapitre suivant – plutôt que des indicateurs relatifs aux quantités. Comme on le verra plus en détail plus loin dans ce chapitre, il devient alors difficile de distinguer entre des catégories d'usagers, notamment les usagers à risque et les usagers excessifs. Pourtant, lorsqu'il s'agit d'identifier les groupes cibles pour les actions de prévention notamment, ces informations seraient essentielles.

Consommation en population générale

Au Canada, cinq enquêtes nationales permettent d'avoir des données sur la consommation de substances psychoactives, alcool, tabac et drogues illicites : l'enquête sur la promotion de la santé (EPS) a été menée en 1985 et 1990, l'enquête nationale sur l'alcool et les autres drogues (ENAD) a été menée deux fois, en 1989 et 1994, et l'enquête sociale générale (ESG) de 1993, par ailleurs menée régulièrement, incluait des données sur les drogues. Ce sont ces données que nous présentons dans les paragraphes qui suivent.

Lors de l'enquête de 1994, 23 % des répondants ont déclaré avoir consommé du cannabis au moins une fois dans leur vie. Comme le montre le graphique suivant, les hommes plus que les femmes, les moins de 35 ans plus que les plus âgés, sont nettement plus susceptibles d'avoir consommé du cannabis.



La consommation varie aussi selon les provinces. Ainsi, toujours selon l'enquête ENAD, elle est la plus élevée en Colombie-Britannique (35,4 %) suivie de l'Alberta (29,4 %), du Manitoba (25,2 %), de la Nouvelle-Écosse (25,1 %) et du Québec (24,7 %) et la plus faible à Terre-Neuve & Labrador (16,3 %), en Ontario (16,6 %) et à l'Île-du-Prince-Édouard (18,6 %).

La prévalence-vie était identique à celle de l'étude de 1989. Comparativement, elle était à 3,4 % en 1970 au moment où la Commission Le Dain menait ses travaux et à 17 % en 1978, indiquant une augmentation continue de la consommation de cannabis.

La prévalence au cours des douze derniers mois est un indicateur plus fin de la consommation courante puisque moins sujette aux biais de mémoire. Le tableau suivant décrit l'évolution de cet indicateur depuis l'étude de 1985.

Consommation de cannabis au cours des 12 derniers mois, 15 ans et plus¹

Année	Enquête	Sexe		Total
		Hommes	Femmes	
1985	Enquête promotion de la santé	6,9 %	4,3 %	5,6 %
1989	Enquête nationale sur l'alcool et les autres drogues	8,9 %	4,1 %	6,5 %
1990	Enquête promotion de la santé	7,0 %	3,0 %	5,0 %
1993	Enquête sociale générale	5,9 %	2,5 %	4,2 %
1994	Enquête nationale sur l'alcool et les autres drogues	10,1 %	5,1 %	7,4 %

¹ Tableau reproduit de CCLAT (1999), *Profil canadien : L'alcool, le tabac et les autres drogues*. Ottawa : auteur, page 142.

Par comparaison, le pourcentage des usagers au cours de la dernière année était de 1 % en 1970 et de 9,7 % en 1979.

Le taux d'usage rapporté dans ces enquêtes varie du simple au double entre les femmes et les hommes. Surtout, il convient de noter la variabilité entre les études. Parce qu'elle portait spécifiquement sur les substances psychoactives plutôt que de s'insérer dans une enquête plus large sur la santé ou les conditions de vie, l'ENAD nous apparaît plus fiable.

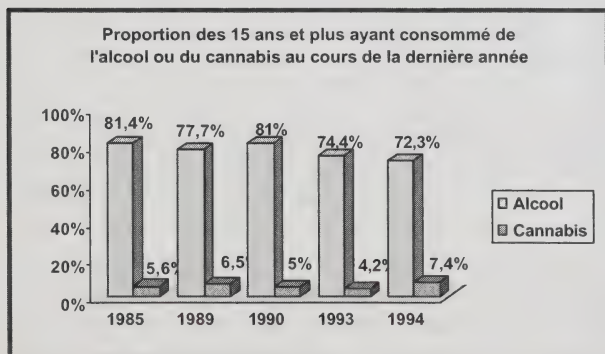
Nous ne disposons pas de données précises sur l'incidence (c'est-à-dire les nouveaux consommateurs) ni sur le taux de discontinuation de l'usage. Sur l'incidence, nous verrons plus loin que l'augmentation de la prévalence chez les jeunes indiquerait une augmentation de l'incidence. Sur la discontinuation, l'on considère généralement que la grande majorité des usagers ne continuent pas au delà d'un usage expérimental, mais nous ne disposons pas de données précises dans la population canadienne.

Nous sommes conscients qu'on ne peut comparer terme à terme les diverses substances psychoactives entre elles. Comme nous le rappelait à juste titre le Dr Zoccolillo lors de son témoignage, chacune a ses caractéristiques et ses effets.

« Il est inutile de comparer le niveau des effets nuisibles de la cocaïne, de la marijuana et de l'alcool. Chaque drogue a son genre particulier d'effets nuisibles. S'il fallait comparer les effets du tabac et de la cocaïne chez les jeunes, vous concluriez que la cocaïne est terrible, mais qu'il n'y a pas lieu de s'inquiéter du tabac parce que les effets nuisibles de celui-ci ne se manifestent que 30 ans plus tard. L'essentiel c'est qu'il existe différents genres d'effets nuisibles et qu'il est inutile d'en faire la comparaison. »²

Néanmoins, nous pensons qu'il est utile de comparer la consommation de cannabis au sein de la population générale à celle d'autres substances pour mieux situer

le phénomène. L'enquête nationale sur l'alcool et les autres drogues de 1994 montre que, parmi les autres drogues illégales, la consommation de cocaïne est à moins de 1 % et celle d'héroïne, LSD ou amphétamines ensemble à environ 1 %. En ce qui concerne les drogues licites, la consommation d'alcool est à plus de 75 % et celle de tabac à près de



² Témoignage du Dr Mark Zoccolillo, professeur de psychiatrie et de pédiatrie, Université McGill et Hôpital pour enfants de Montréal, Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, deuxième session de la trente-sixième législature, 16 octobre 2000, fascicule 1, page 80.

30 %. Le graphique ci-dessus compare la consommation de cannabis à celle de l'alcool chez les personnes de plus de 15 ans.

Des études en population générale sont menées en Ontario depuis 1977. Il s'agit donc de la base de données la plus extensive dont nous disposions au Canada – une base d'autant plus intéressante que l'Ontario mène aussi, depuis 1977, des études en milieu scolaire auprès des jeunes permettant ainsi de mieux suivre les tendances.

Selon le rapport 2000 du Centre sur la toxicomanie et la santé mentale (CTSM)³, plus du tiers (35 %) des Ontariens de plus de 18 ans ont consommé du cannabis au moins une fois dans leur vie, 10,8 % au cours des 12 derniers mois. Ce pourcentage d'utilisateurs au cours de la dernière année a peu varié depuis 1984 (11,2 %), mais est en légère augmentation par rapport à l'année 1977 (8 %). Le groupe des 18-29 montre l'augmentation la plus régulière, de 18,3 % en 1996 à 28,2 % en 2000 ; par ailleurs, le taux pour ce groupe était à 28,5 % en 1984. Sur le long terme, on observe aussi une augmentation de la consommation au cours des 12 derniers mois chez les 30-49, de 6,2 % en 1977 à 18,7 % en 2000. Le tableau suivant présente certaines données tirées du rapport.

Usagers de cannabis au cours des 12 derniers mois, Ontariens, 18 ans et plus

(N =)	1977 (1059)	1982 (1026)	1984 (1043)	1987 (1075)	1989 (1098)	1991 (1047)	1992 (1058)	1994 (2022)	1996 (2721)	1997 (2776)	1998 (2509)	1999 (2346)	2000 (2406)
Total	8,1	8,2	11,2	9,5	10,5	8,7	6,2	9,0	8,7	9,1	8,6	10,4	10,8
Hommes	11,2	12,3	15,6	12,3	13,0	11,5	9,1	11,4	12,6	11,4	12,1	13,2	14,3
Femmes	4,5	4,1	7,1	6,8	8,2	6,0	3,6	7,0	5,3	7,0	5,4	7,8	7,7
18-29	22,6	22,7	28,5	20	24,6	19,9	13,3	19,6	18,3	21,4	25,2	27,1	28,2
30-39	3,9	4,2	9,5	11,6	11,8	9,1	6,6	10,2	11,3	9,8	8,2	10,3	12,3
40-49	2,3		2,2	5,4	3,9	3,0	2,4	4,3	6,1	4,3	4,6	6,8	6,4
50-64	1,2	1,3	1,8		1,4		1,3			1,7	1,4	4,1	2,9

Parmi ceux qui ont consommé au moins une fois au cours de leur vie, 68 % n'ont pas consommé au cours des derniers 12 mois, 15 % moins d'une fois par mois, et 17 % plus d'une fois par mois ou plus. Parmi les usagers au cours de la dernière année, 47 % consommaient moins d'une fois par mois et 53 % au moins une fois par mois.

Au Québec, des études en population générale ont été menées en 1987, 1992 et 1998. L'enquête sociale et de santé (ESS)⁴ de 1998 révèle que 31,3 % des 15 ans et plus ont fait usage du cannabis ou d'une autre drogue illicite au moins une fois dans leur vie et que 13,5 % ont consommé du cannabis au moins une fois au cours des derniers

³ Adlaf, E.M. et A. Ialomiteanu (2000) *CAMH Monitor Report : Addiction and Mental Health Indicators among Ontario Adults, 1977-2000*. Toronto : Centre for Addiction and Mental Health, pages 61-67.

⁴ Chevalier, S. et O. Lemoine (2000) « Consommation de drogues et autres substances psychoactives » dans *Enquête sociale et de santé 1998*, Québec : Institut de la statistique du Québec, chapitre 5, page 137.

mois. Comme ailleurs, la consommation est fonction de l'âge : chez les 15-24, la consommation de drogues illicites est de 39,7 %, elle est de 18,4 % chez les 25-44, de 8 % chez les 45-64, et de 5,5 % chez les 65 ans et plus. Si 83,7 % des 45-64 ans et 93,8 % des 65 ans et plus disent ne jamais avoir fait usage de drogues prohibées, plus de 40 % des 25-44 ans et la moitié (50,3 %) des 15-24 ans affirment en consommer ou l'avoir déjà fait.

Consommation chez les jeunes

Plusieurs témoins ont fait état d'augmentations « préoccupantes » de la consommation de cannabis chez les jeunes de moins de 18 ans.

« Grâce aux études qui indiquent que le taux de consommation du cannabis chez les jeunes en général, et plus particulièrement chez les jeunes de la rue et les jeunes à risque, et aux connaissances sur les méfaits de la consommation de drogues, nous savons que le problème devient de plus en plus aigu. »⁵

« Il faut porter une attention spéciale aux mineurs quand on élabore une politique en matière de drogues. Une politique visant uniquement les adultes aura peut-être de vives conséquences non voulues sur les adolescents. Nous avons une obligation parentale à l'égard des adolescents. Ce ne sont pas des adultes. »⁶

« Le sondage réalisé auprès des élèves ontariens est également déconcertant. On constate une forte hausse de l'usage des drogues, quelles qu'elles soient, depuis 1993. (...) Celle du cannabis a plus que doublé et atteint 29 %. (...) Malheureusement, les seules statistiques qui sont en régression sont celles qui concernent les élèves qui ne consomment pas de drogues. Le chiffre est tombé de 36 à 27 %, et l'on est donc passé de près d'un tiers à près d'un quart aujourd'hui. Nous sommes manifestement à une époque où les jeunes voient dans les drogues une solution à leurs problèmes existentiels. »⁷

De fait, la consommation de substances psychoactives chez les jeunes en milieu scolaire a connu des augmentations significatives au cours des dernières années. Au plan national, l'enquête réalisée auprès des jeunes de 6, 8 et 10^e années (environ 2 000 jeunes par niveau scolaire) en 1990, 1994 et 1998⁸, rapporte que l'utilisation de la marijuana a évolué de la manière suivante :

⁵ Témoignage de M.J. Boyd, président du Comité sur la toxicomanie et sous-chef du Service de police de Toronto, Association canadienne des chefs de police, Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 mars 2002, fascicule 14, page 77.

⁶ Témoignage du Dr Mark Zoccolillo, *op. cit.*, page 79.

⁷ Témoignage de R.G. Lesser, surintendant principal, Gendarmerie Royale du Canada, Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 29 octobre 2001, fascicule 8, page 9.

⁸ King, A.J.C. et coll., (1999) *La santé des jeunes : tendances au Canada. Les comportements de santé des jeunes d'âge scolaire*. Ottawa : Santé Canada.

Étudiants de 8^e et 10^e année qui ont consommé du cannabis au moins une fois

	1990	1994	1998
8^e année			
filles	10 %	11 %	18 %
garçons	11 %	13 %	21 %
10^e année			
filles	24 %	27 %	41 %
garçons	26 %	30 %	44 %

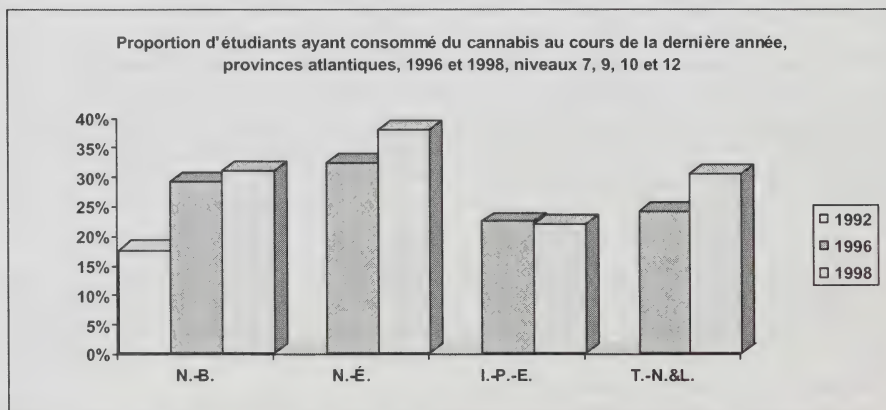
Des enquêtes sur la consommation de substances psychoactives, dont le cannabis, chez les jeunes, ont été menées dans certaines provinces. Elles permettent d'avoir une image plus précise de l'évolution de la consommation de cannabis chez les jeunes dans ces provinces, mais leurs résultats ne sont cependant pas comparables d'une province à l'autre.

Atlantique

Dans les provinces atlantiques (Terre-Neuve & Labrador, Île-du-Prince-Édouard, Nouvelle-Écosse et Nouveau-Brunswick) la consommation de cannabis chez les jeunes de niveau secondaire a fait l'objet d'enquêtes universelles identiques pour la première fois en 1996.⁹ L'étude s'est répliquée en 1998. L'enquête de 1996 a porté sur 14 908 étudiants et celle de 1998 sur 13 539 étudiants des niveaux 7, 9, 10 et 12.¹⁰

Le graphique suivant présente les principales données des deux enquêtes et la base de 1992 pour le Nouveau Brunswick.

La consommation de cannabis chez les étudiants dans les provinces atlantiques



⁹ Le Nouveau Brunswick a mené des études en population scolaire en 1986, 1989 et 1992.

est passée de 28 % en 1996 à près de 33 % en 1998. Par province, observe les tendances suivantes :

❖ *En Nouvelle-Écosse, entre 1991 et 1998 :*

- Le pourcentage d'étudiants utilisant des drogues illicites a presque doublé ;
- Le pourcentage d'étudiants déclarant avoir consommé du cannabis au cours de la dernière année est à près de 38 % en 1998, comparativement à 32 % en 1996 ;
- La répartition par niveau est la suivante : 11,4 % au niveau 7, 41 % au niveau 9, 47,6 % au niveau 10 et 51,7 % au niveau 12 ;
- Le pourcentage d'étudiants utilisant du cannabis plus d'une fois par mois a triplé, passant de 4,4 % à 13,5 % ; les hommes (17,5 %) sont plus nombreux que les femmes (9,3 %) à consommer une fois par mois.

❖ *Au Nouveau Brunswick :*

- La proportion d'étudiants déclarant avoir consommé du cannabis est passée de 17,4 % en 1992 à 29 % en 1996 et à 31 % en 1998 ;
- Parmi les usagers de cannabis, 5,5 % ont expérimenté au cours de l'année et 11 % étaient des usagers fréquents (plus d'une fois par mois) ;
- Comme dans les autres provinces, les hommes (33,4 %) sont plus nombreux que les femmes (28,3 %) à consommer du cannabis ;

En comparaison, 56 % des étudiants des provinces atlantiques en 1996 et près de 59 % en 1998 ont déclaré avoir consommé de l'alcool au moins une fois au cours de l'année précédente.

Manitoba

Au Manitoba, une enquête non aléatoire d'écoles de la province a été menée en 2001 auprès de 4 680 étudiants provenant de 32 écoles.¹¹ Même si l'échantillon n'est pas totalement représentatif de l'ensemble des étudiants du Manitoba, il est suffisamment important pour offrir une bonne représentation de la situation dans la province.

La quasi-totalité des étudiants ayant déclaré avoir consommé des drogues illicites au cours de l'année précédente ont utilisé de la marijuana (96 %) : 47,7 % des étudiants ont consommé au moins une fois dans leur vie et 39,7 % au cours de l'année

¹⁰ Voir <http://www.gov.ns.ca/health/student-drug-use/contents.htm> pour la Nouvelle-Écosse et <http://www.gnb.ca/0378/en/sdus1998/index.htm> pour le Nouveau-Brunswick. Un sommaire est aussi disponible sur le site du CCLAT à l'adresse <http://www.ccsa.ca/Reports/STUDENT.HTM>

¹¹ Patton, D., et coll., (2001) *Substance use among Manitoba high school students*. Winnipeg : Addictions Foundation of Manitoba. Disponible sur le site www.afm.mb.ca

précédente (comparativement à 37,4 % en 1995 et à 38,8 % en 1997). L'âge moyen à la première utilisation est de 14,1 ans. Les garçons (40,4 %) sont plus nombreux que les filles (35,4 %) à avoir consommé du cannabis au cours de l'année précédente. Parmi les usagers, 8,5 % consommaient à peu près une fois par mois et 15,8 % plus d'une fois par mois (20,5 % chez les garçons et 11,2 % chez les filles).

Par comparaison, 87,4 % des étudiants ont consommé de l'alcool au moins une fois dans leur vie et 80,4 % au moins une fois au cours de l'année précédente. L'âge moyen de la première consommation est de 13,3 ans. Parmi ceux qui ont consommé au cours de l'année précédente, 26 % l'ont fait une fois par semaine ou plus, et 46,5 % au moins une fois par mois. On observe une progression de la consommation hebdomadaire par niveau, de 17 % au niveau 1 à 33 % au niveau 4. Notons enfin que 27,7 % des étudiants ont consommé cannabis, alcool et tabac au cours de la dernière année.

Ontario

En Ontario, l'enquête sur la consommation des drogues parmi les étudiants¹² (OSDUS) 2001 révèle qu'en moyenne 33,6 % des jeunes entre la 7^e et la 13^e année rapportent avoir consommé du cannabis au moins une fois et 29,8 % au cours des derniers mois (les pourcentages sont de 33,8 % et 23,6 % pour le tabac et 70,6 % et 65,6 % pour l'alcool). Le taux d'utilisation est significativement plus élevé pour les garçons que chez les filles. Si l'on examine l'évolution des tendances, on constate qu'après avoir atteint un creux au début des années 90, les taux des deux dernières enquêtes sont comparables à ceux de la fin des années 70 et du début des années 80.

Usagers de cannabis au cours des 12 derniers mois, Ontariens, 7^e à 13^e année

(N =)	1977 (4687)	1979 (4794)	1981 (3270)	1983 (4737)	1985 (4154)	1987 (4267)	1989 (3915)	1991 (3945)	1993 (3571)	1995 (3870)	1997 (3990)	1999 (2868)	2001 (2326)
Total	25,1	31,7	29,9	23,7	21,2	15,9	14,1	11,7	12,7	22,7	24,9	29,2	28,6
Hommes	29,4	36,4	33,2	28,0	24,4	18,7	14,7	13,2	14,8	25,7	25,7	32,5	32,1
Femmes	21,1	26,8	26,3	19,4	17,9	13,2	13,5	9,9	10,7	19,8	24,1	25,8	25,1
7^e	5,6	10,4	5,7	5,2	4,7	3,8	0,9	0,7	1,7	2,8	3,4	3,6	5,1
8	-	-	-	-	-	-	-	-	-	-	-	-	-
9^e	23,2	29,2	27,1	25,1	18,3	12,1	12,9	8,1	8,7	19,6	23,9	25,5	28,8
10^e	-	-	-	-	-	-	-	-	-	-	-	-	-
11^e	39,4	50,2	44,2	42,1	35,1	24,3	22,5	20,2	22,3	40,7	42,0	48,1	45,7
12^e	-	-	-	-	-	-	-	-	-	-	-	-	-
13^e	42,4	43,6	37,4	36,5	30,8	30,5	28	20,5	21,6	27,5	31,9	43,3	43,9

¹² Adlaf, E.M. et A. Paglia (2001) *Drug Use among Ontario Students 1977-2001. Findings from the OSDUS*. Toronto : Centre for Addiction and Mental Health.

Lorsqu'on compare les tendances d'usage du cannabis à celles d'autres substances, on observe que :

- La consommation de tabac au cours des 12 derniers mois a diminué de 30,4 % à 22,3 % des élèves ;
- La consommation d'alcool au cours des 12 derniers mois a diminué de 76,3 % à 62,6 % des élèves ;
- La consommation d'héroïne est passée de 2,0 % à 1,2 % ;
- La consommation de cocaïne est demeurée stable à 3,8 % ;
- La consommation d'amphétamines est passée de 2,7 % à 3,1 % ;
- La consommation d'ecstasy est passée de 0,6 % en 1993 (première mesure) à 6,0 % en 2001.

L'enquête ontarienne examine la fréquence de la consommation. Parmi les usagers de cannabis en 2001, 25 % en ont consommé une ou deux fois, 30 % entre 3 et 9 fois, et 45 % plus de 10 fois. Au total, 16,9 % de tous les étudiants ont consommé du cannabis au moins 6 fois au cours des 12 derniers mois. Le tableau suivant décrit l'évolution de la fréquence de consommation au cours des 12 derniers mois depuis 1981.

Fréquence de consommation au cours des 12 derniers mois parmi les usagers, Ontario¹³

	1981 (1002)	1983 (1304)	1985 (907)	1987 (701)	1989 (570)	1991 (515)	1993 (455)	1995 (873)	1997 (1019)	1999 (778)	2001 (636)
1-2 fois	28,2	32,4	33,7	39,8	42,6	37,1	41,1	31,7	29,5	28,8	25,6
3-5	12,4	15,1	18,3	16,2	17,2	17,7	17,5	17,1	16,3	14,7	17,1
6-9	14,0	12,5	11,3	9,0	10,5	12,2	10,1	10,4	12,4	13,9	11,4
10-19	13,0	11,4	11,3	14,1	11,8	9,8	9,0	12,5	12,3	11,9	14,9
20-39	10,7	9,0	8,3	6,2	8,3	8,9	8,8	9,0	9,8	9,5	10,2
40 +	21,7	19,5	17,1	14,8	17,1	14,3	13,6	19,4	19,7	21,2	20,9

De manière encore plus pointue, l'étude examine la consommation au cours des quatre dernières semaines. Au total, 8,4 % des étudiants ont consommé du cannabis sur une base hebdomadaire et 3,1 % sur une base quotidienne. La proportion des étudiants qui n'ont pas consommé de cannabis au cours du dernier mois est passée de 90,2 % en 1987 à 66,6 % en 2001.

Le tableau suivant décrit l'évolution de la consommation mensuelle parmi les usagers des douze derniers mois au cours de la période 1987-2001. On y observe notamment une diminution de ceux qui n'ont pas fait usage du cannabis au cours du

¹³ Tableau reproduit de Adlaf et Paglia, *op. cit.*, page 57.

dernier mois (de 41 % en 1987 à 30 % en 2001) et, inversement, une augmentation de ceux qui ont en ont fait un usage quotidien (de 3,5 % en 1987 à 9,1 % en 2001).

Fréquence de l'usage mensuel parmi les usagers des douze derniers mois, osdus¹⁴

	1987 (701)	1989 (570)	1991 (515)	1993 (455)	1995 (873)	1997 (1019)	1999 (778)	2001 (636)
Jamais								
Total	41,1	46,0	44,1	37,2	30,9	33,0	30,5	30,6
Hommes	38,1	44,8	38,6	29,7	28,4	28,9	28,5	23,2
Femmes	45,3	47,2	51,8	47,5	33,8	36,9	33,0	39,8
1-2 fois le mois								
Total	36,6	38,3	34,5	36,9	35,7	34,2	34,8	33,2
Hommes	36,7	33,8	33,4	35,8	33,8	30,4	31,1	32,9
Femmes	36,4	42,9	36,0	38,1	37,9	37,9	39,4	33,6
1-2 fois la semaine								
Total	9,7	9,6	7,9	9,9	14,4	13,7	12,5	11,3
Hommes	9,8	10,6	8,7	12,7	15,5	14,6	12,9	12,3
Femmes	9,5	8,5	6,7	6,1	13,2	12,8	12,0	10,1
3-4 fois la semaine								
Total	4,9	2,6	5,8	5,9	9,2	7,6	8,5	8,3
Hommes	4,6	4,8	8,5	7,4	9,4	10,2	10,2	9,9
Femmes	5,5	0,4	2,0	3,8	9,0	5,1	6,3	6,4
5-6 fois la semaine								
Total	4,1	1,0	2,4	5,1	3,6	3,9	4,4	7,4
Hommes	5,3	1,9	3,2	7,5	4,4	4,5	5,9	7,5
Femmes	2,5		1,2	2,0	2,5	3,4	2,6	7,3
Chaque jour								
Total	3,5	2,6	2,6	5,0	6,3	7,6	9,3	9,1
Hommes	5,6	4,1	4,1	6,9	8,6	11,4	11,3	14,3
Femmes	0,8	1,1	1,1	2,4	3,6	3,9	6,6	2,8

L'enquête OSDUS permet aussi de savoir quelle quantité est consommée. Parmi les usagers des 12 derniers mois en 2001, 15 % ont fumé moins d'un joint, 21 % environ un, 22 % en ont fumé 2 à 3, et 15 % plus de 4. Enfin, l'étude examine aussi la question de l'âge de la première initiation. Au total, en 2001, 10,2 % des étudiants ont utilisé du cannabis pour la première fois, dont 31,7 % des usagers de cannabis au cours des 12 derniers mois. L'âge d'initiation ne varie pas selon le sexe ou la région mais est significativement relié au niveau scolaire : entre la huitième et la neuvième année (14-15 ans), la proportion de ceux qui ont fumé du cannabis passe de 6 % à 14,9 %.

¹⁴ *Ibid.*, page 58.

L'initiation précoce (7^e année, environ 12 ans) au cannabis a diminué au fil des ans : en 2001, 2% des étudiants de 7 disaient avoir utilisé du cannabis au moins une fois l'année précédente (soit vers l'âge de 11 ans), un taux inférieur à celui qui était enregistré en 1997 (5 %) et en 1981 (8 %).

Québec

Au Québec, on constate selon certains observateurs une augmentation « inquiétante » de la consommation régulière de cannabis chez les jeunes. Selon Michel Germain, directeur du CPLT, l'augmentation de l'usage serait davantage reliée à des valeurs sociales, notamment à des messages relatifs à une certaine banalisation de l'acceptabilité des drogues, qu'à des facteurs sociodémographiques tels le revenu ou la composition familiale.

Les données disponibles ne sont pas immédiatement comparables à celles qui sont recueillies en Ontario. Elles proviennent des trois enquêtes menées par Santé Québec en 1987, 1992 et 1998 en population générale et portent sur le groupe des 15-24 ans : respectivement 3 136, 3 912 et 3 587 répondants), distingué entre les 15-17, les 18-19 et les 20-24.¹⁵

L'étude révèle d'abord une diminution statistiquement significative du nombre de jeunes qui déclarent n'avoir jamais consommé de drogues entre 1987 et 1998 (71,3 % en 1987, 57,4 % en 1992 et 50,3 % en 1998). Les consommateurs « actuels », au cours des douze derniers mois, sont 39,7 % des jeunes en 1998 contre 27 % en 1992. Par tranche d'âge, l'augmentation de la consommation de drogues illicites (significative dans chaque cas à $p < .001$) se traduit ainsi :

- 15 – 17 ans : 26,2 % à 37,6 %
- 18 – 19 ans : 28,1 % à 41,6 %
- 20 – 24 ans : 26,2 % à 40,3 %

Parmi les usagers de drogues, le pourcentage de ceux qui utilisent de la marijuana exclusivement est passé de 15 % en 1992 à près de 26 % en 1998, tandis que la proportion de ceux qui utilisent d'autres drogues est demeurée stable à environ 13 %.

Tendances d'usage dans d'autres pays

Les tendances d'usage ne sont évidemment pas comparables immédiatement d'un pays à l'autre, non seulement en raison de différences culturelles, mais aussi parce que les systèmes de collecte sur les tendances d'usage ne mesurent pas tous la même chose de la même manière, ni souvent sur les mêmes années. En Europe, les travaux de

¹⁵ Vitaro, F, Gosselin C. et A. Girard (2002) *Évolution de la consommation d'alcool et de drogues chez les jeunes au Québec de 1987 à 1998 : constatations, comparaisons et pistes d'explication*. Montréal : Comité permanent de lutte à la toxicomanie.

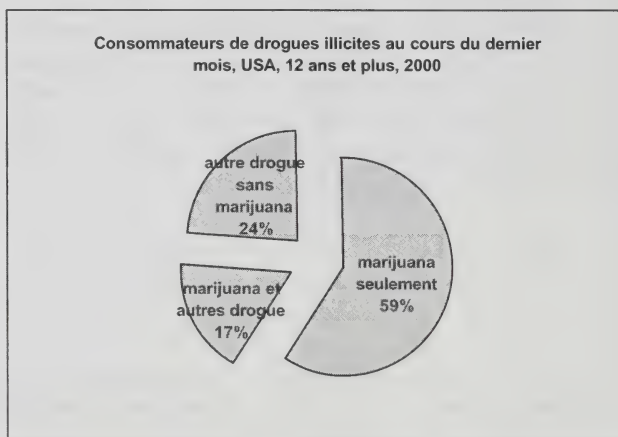
l'Observatoire européen sur les drogues et les toxicomanies (OEDT) permettent peu à peu d'arriver à une uniformisation des collectes de données dans les divers pays de l'Union permettant ainsi une meilleure comparabilité. Néanmoins, il subsiste des différences importantes entre les pays.

Malgré ces réserves, il est intéressant de comparer les tendances d'usage entre les divers pays. Dans un premier temps, nous examinons la situation aux États-Unis, au Royaume-Uni, en France et aux Pays-Bas et dans un deuxième temps nous tentons des comparaisons sur quelques indicateurs sélectionnés.

États-Unis

Aux États-Unis, deux grandes enquêtes sont menées depuis plusieurs années : une enquête en population générale sous l'égide du ministère de la Santé et l'étude *Monitoring the Future* de l'Université du Michigan pour le compte du *National Institute on Drug Abuse* (NIDA) auprès de cohortes de gradués.

L'enquête en population générale pour 2000¹⁶ révèle que 6,3 % des Américains de 12 ans et plus ont fait usage de drogues illicites au cours du dernier mois, et 4,8 % (contre 4,7 % en 1999) ont consommé du cannabis. Au total, 14 millions d'Américains sont considérés comme *usagers actuels* de drogues illicites, c'est-à-dire ceux qui ont consommé au cours du dernier mois. Le graphique ci-contre montre que, parmi ce groupe d'usagers, 76 % sont consommateurs de marijuana et 59 % de marijuana seulement.

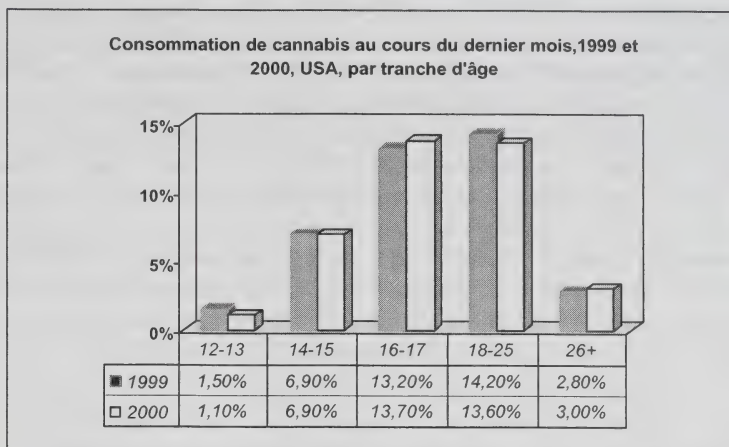


On estime que le nombre des nouveaux usagers en 1999 était de 2 millions, contre 2,6 millions en 1996 et 1,4 millions en 1990. Les deux tiers des nouveaux consommateurs ont entre 12 et 17 ans, les autres entre 18-25. L'âge moyen de la première expérimentation de cannabis est de 17 ans en 1999, comparativement à environ 19-20 à la fin des années 1960.

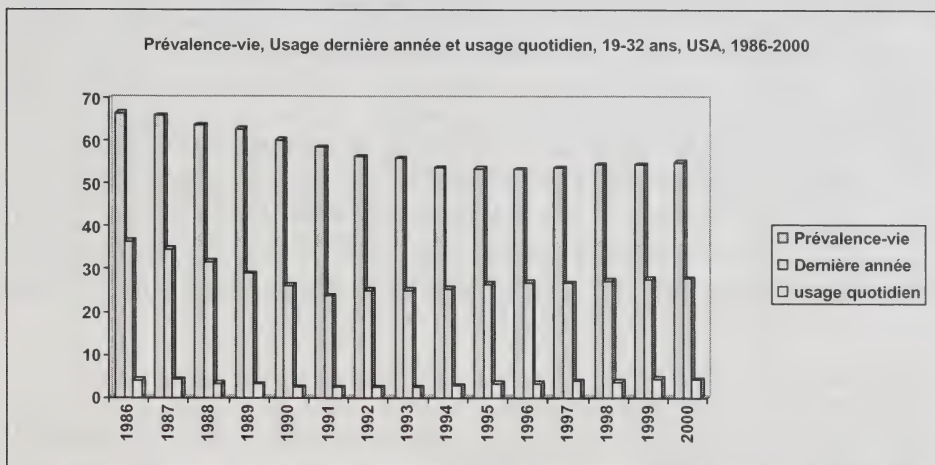
La fréquence de consommation chez les usagers courants aurait augmenté entre 1999 et 2000 : 31,6 % en 1999 ont consommé du cannabis 100 jours ou plus au cours

¹⁶ Substance Abuse and Mental Health Services Administration (2001) *Summary of findings from the 2000 national household survey on drug abuse*. Washington, DC : Department of Health and Social Services

de l'année précédente, comparativement à 34,7 % en 2000. Enfin, la répartition des groupes d'âge suit les tendances attendues comme le montre le graphique suivant :



L'enquête *Monitoring the Future* 2000¹⁷ présente les tendances d'usage depuis 1986 pour des cohortes de jeunes diplômés compris entre 19 et 32 ans. La figure suivante résume ces données.



¹⁷ Johnston, L.D., et coll., (2001) *Monitoring the future. National Survey Results of Drug Use, 1975-2000. Volume II College Students and Young Adults Ages 19-40*. Bethesda, Michigan : NIDA.

En 2000, la prévalence-vie chez les personnes de 31-32 ans atteignait 73 % pour l'ensemble des drogues illicites, et 68 % pour la marijuana.

Royaume-Uni

Au Royaume-Uni, le *British Crime Survey*¹⁸ mesure les tendances d'usage de drogues illicites depuis le début des années 1980 à chaque deux ans. Depuis la création de l'OECD, l'organisme *Drugscope*¹⁹ est devenu le correspondant pour le Royaume-Uni et fait état annuellement des tendances d'usage et d'indicateurs connexes.

Le pourcentage de répondants âgés entre 16 et 59 ans ayant consommé une drogue illicite *au cours de l'année précédente* au Royaume-Uni est passé de 9,9 % en 1994 à 10,7 % en 2000. Pour le cannabis, les proportions sont 8,4 % et 9,4 % respectivement. La *prévalence-vie* de l'usage de cannabis chez les 16-29 ans est passée de 34 % en 1994 à 44 % en 2000. En fonction du groupe d'âge, les tendances d'usage au cours de la dernière année sont les suivantes :

- Chez les 16-19 ans : de 29 % en 1994 à 25 % en 2000 ;
- Chez les 20-24 ans : de 23 % en 1994 à 27 % en 2000 ;
- Chez les 25-29 ans : de 12 % en 1994 à 17 % en 2000.

Dans chaque cas, les hommes consomment plus que les femmes.

Le rapport note que le changement le plus important concerne la consommation de cocaïne chez les jeunes hommes de la classe d'âge des 16-29 ans dont la consommation est passée de 1,2 % à 4,9 %.

France

Les travaux de l'Observatoire français des drogues et des toxicomanies (OFDT) ont permis une sérieuse mise à niveau de la connaissance des tendances et de la veille en France. L'OFDT publie un rapport bisannuel sur les tendances d'usage et les indicateurs connexes (saïsis, interpellations, demandes de traitement, etc.) ainsi qu'une série d'études et de rapports techniques sur des enjeux spécifiques. Dans son rapport 2002, l'OFDT²⁰ montre que la consommation de cannabis se répartit comme suit :

- Prévalence-vie : 21,6 % de la population adulte (18-75)
- Usage occasionnel (au moins une fois dans l'année) : 6,5 %
- L'usage répété (au moins dix fois dans l'année) : 3,6 %
- L'usage régulier (dix fois par mois et plus) : 1,4 %.

¹⁸ Les rapports pour 1998 et 2000 sont disponibles en ligne sur le site web du Home Office à l'adresse : <http://www.homeoffice.gov.uk/rds/pdfs/hors224.pdf>

¹⁹ Le rapport 2000 est disponible en ligne à l'adresse : <http://www.drugscope.org.uk/wip/11/3/pdf/UK%20DRUG%20SITUATION%202001.pdf>

²⁰ Observatoire français des drogues et des toxicomanies (2002) *Drogues et dépendances. Indicateurs et tendances 2002*. Paris : auteur, pages 98-99.

Il y a près de deux fois plus d'expérimentateurs chez les hommes que chez les femmes et parmi les 18-34 ans 40,5 % sont expérimentateurs. La proportion d'expérimentateurs décroît avec l'âge. La consommation répétée concerne 14,6 % des 18-25 et 1,6 % des personnes de plus de 26 ans. L'OFDT note que *«la part de la population adulte (âgée de 18-44 ans) ayant expérimenté le cannabis est de plus en plus élevée. Cette augmentation est la marque d'une banalisation du cannabis.»* D'autant plus que chez les adolescents la consommation a progressé significativement. Ainsi, en 1993, 34 % des garçons et 17 % des filles déclaraient avoir consommé du cannabis à 18 ans, contre 59 % et 43 % respectivement en 1999. En fait, ajoute le rapport de l'OFDT, *«l'expérimentation du cannabis est devenue un comportement majoritaire chez les jeunes arrivant à l'âge adulte».*

De manière intéressante, le rapport de l'OFDT permet de construire une typologie des usages, voire si l'on étend un peu le raisonnement de proposer des balises pour les comportements qui peuvent présenter des risques.

Le tableau suivant présente la fréquence de consommation chez les jeunes à la fin de l'adolescence.²¹ Au delà du clivage de sexe déjà noté dans les autres enquêtes épidémiologiques, on y observe que moins du quart des garçons de 17 ans déclarent fumer de façon au moins répétée alors qu'ils sont le tiers à 19 ans. De même, entre 17 et 19 ans, chez les garçons, la part des abstinents baisse de 10 points.

Fréquence de la consommation de cannabis chez les jeunes à la fin de l'adolescence en 2000, par âge, sexe et type de consommation

Type de consommation	Définition	Filles, 17 ans	Garçons, 17 ans	Garçons, 18 ans	Garçons, 19 ans
Abstinent	Jamais	59,2	49,9	45,1	39,8
Expérimentateur	Déjà consommé mais pas au cours de l'année	5,0	5,4	6,5	8,2
Occasionnel	Entre 1 et 9 fois par an	23,3	20,9	19,9	19,4
Répété	Plus de 9 fois par an moins de 10 fois par mois	7,4	9,3	9,9	10,1
Régulier	Entre 10 et 19 fois par mois	2,6	6,4	6,2	6,8
Intensif	20 fois et plus par mois	2,6	8,0	12,4	15,8

L'autre découpage intéressant proposé dans le rapport de l'OFDT – découpage qui peut mettre sur la piste de situations problématiques (et qui pourrait notamment être utile aux fins de prévention) même si le rapport prend soin de préciser qu'il n'y a pas recoupage entre ces profils et les risques – porte sur les modes de consommation.

²¹ *Ibid.*, page 100.

Il s'agit ici du fait de fumer seul et le matin ou le midi. On observe une relation linéaire presque parfaite entre les types et les modes de consommation comme l'indique le tableau suivant.²²

Fréquence de l'usage de cannabis le matin ou en solitaire chez les jeunes à la fin de l'adolescence en 2000 par type de consommation

Type de consommation	Matin ou midi			Seul		
	Jamais	Parfois	Souvent	Jamais	Parfois	Souvent
Occasionnel	57,2	40,4	2,4	81,9	16,2	1,9
Répété	17,9	69,8	12,3	46,4	46,6	7,0
Régulier	4,7	58,9	36,4	19,9	60,2	19,8
Intensif	1,1	22,7	76,1	4,5	38,2	57,3

C'est là ce qu'expliquait le Directeur de l'Observatoire, monsieur Jean-Michel Coste, lors de son témoignage devant le Comité :

« Je crois qu'il est extrêmement important de répondre aux préoccupations des pouvoirs publics lorsqu'en matière de prévention, ces pouvoirs publics sont à la recherche d'un dispositif dont l'objectif n'est pas seulement de prévenir le premier usage mais également de prévenir le passage d'un usage régulier à un usage problématique.

Du point de vue des enquêtes, il est important de cerner cette notion d'usage problématique et de graduer les consommateurs. Il est possible de le faire en essayant de repérer les consommations qui restent occasionnelles, celles qui sont sur des bases répétées ou régulières et celles qui sont problématiques.

Actuellement, on tente de cerner trois critères de consommation. On tente de voir si le jeune consomme le cannabis de façon intensive ou journalière, s'il le consomme fréquemment seul, et s'il le consomme souvent le matin. Si on arrive à la conjonction de ces trois critères, je crois qu'on peut cerner un objet qui recouvre la notion d'usage problématique de cannabis. »²³

Pays-Bas

La situation des Pays-Bas est particulièrement intéressante considérant l'approche unique que ce pays a choisi de suivre dès 1976.²⁴ Les tendances d'usage ont fait l'objet d'une première enquête épidémiologique en population générale en 1997 et les résultats

²² *Ibid.*, page 101.

²³ M. Jean-Michel Coste, Directeur, Observatoire français des drogues et des toxicomanies, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 1^{er} octobre 2001, fascicule no7, pages 31-32.

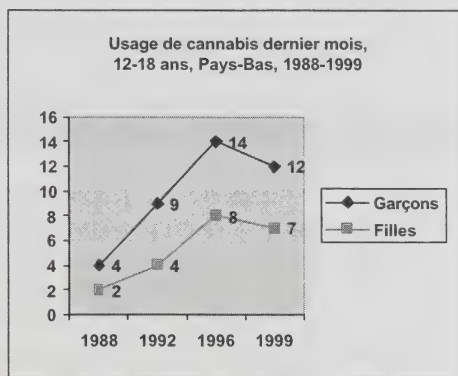
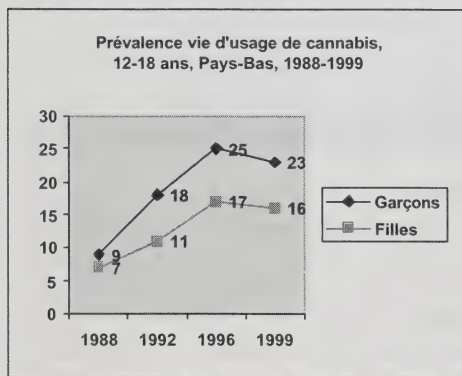
²⁴ Le chapitre 20 discute plus amplement des approches de politique publique dans divers pays.

de la seconde (2001) devraient être connus prochainement. Les données indiquent, pour les personnes entre 15 et 64 ans, une prévalence-vie de 19,1 %, une consommation l'année précédente pour 5,5 %, tandis que 2,5 % ont consommé au cours du dernier mois. Les nouveaux expérimentateurs au cours de l'année précédente représentent 1 % de la population et l'âge moyen des usagers est de 28 ans. Chez les 15-34, la prévalence-vie est de 31,8 % et l'usage au cours de la dernière année est de 14,2 %.

Parmi les usagers récents (au cours du dernier mois), la fréquence d'usage se répartit comme suit :

- 45 % ont consommé entre 1 et 4 jours au cours du mois
- 14 % entre 5 et 8 jours
- 15 % entre 9 et 20 jours
- 26 % plus de 20 jours.

Par ailleurs, les Pays-Bas ont mené des enquêtes auprès des étudiants entre 10 et 18 ans depuis 1984. Les données indiquent une augmentation significative de la prévalence-vie et de l'usage courant (dernier mois) comme le montrent les graphiques suivants (seules les données sur les 12-18 sont présentées).²⁵



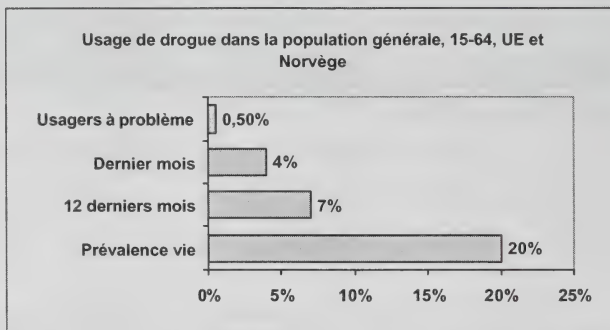
Comme dans les autres études, les garçons sont plus nombreux à consommer et la prévalence augmente avec l'âge : chez les 16-17 ans, la prévalence vie est de 43 % chez les garçons et de 31 % chez les filles et l'usage courant de 22 % et 11 % respectivement.

²⁵ Trimbos-Instituut (2000) *The Netherlands Drug Situation 2000*. Report to the EMCDDA. Disponible en ligne à l'adresse : http://www.emcdda.org/multimedia/publications/national_reports/NRnetherlands_2000.PDF

Tendances d'usage en Europe, 15-64

Les travaux de l'OEDT sur l'Europe et la Norvège permettent d'établir une gradation révélatrice de la nature des usages de drogues illicites. Le tableau ci-contre porte sur toutes les drogues illicites, mais l'on sait par ailleurs que le cannabis demeure dans tous les pays la drogue de choix pour au moins 90 % des usagers. Il est pertinent pour nos propos puisque, comme nous le verrons plus loin, nous tenterons d'estimer les proportions d'usagers selon les formes d'usage de cannabis au Canada.

Autrement dit, pour environ 50 millions de personnes qui ont expérimenté au moins une fois dans leur vie une drogue illicite, environ 17,5 millions en auraient fait usage au cours des 12 derniers mois, 10 millions au cours du dernier mois, et 0,5 % seraient considérés comme usagers à problème.



Comparaisons internationales

Malgré des différences significatives entre les modes d'enquête (type de questionnaire et de forme de passation), les indicateurs, les années étudiées et les âges, les tableaux suivants fournissent quelques indications précieuses sur la prévalence dans un ensemble de pays.

Le premier tableau donne des informations sur l'année de l'enquête, l'âge des répondants, et les proportions déclarant une prévalence de consommation de cannabis au cours de la vie et au cours de la dernière année. Aux fins de comparaison, nous ajoutons les données de la plus récente enquête ontarienne en population générale.

La prévalence-vie de consommation passe de 10 % en Finlande à 39 % en Australie, tandis que la consommation au cours de la dernière année passe de 1 % en Suède à 18 % en Australie. L'Ontario, avec des taux de 35 % et de 11 % figure parmi les endroits où la consommation de cannabis est la plus élevée.

Prévalence-vie et consommation dans la dernière année, population générale ²⁶

Pays	Année	Mode de collecte	Échantillon	âges	Prévalence-vie	Année dernière
Australie	1998	Mixte	10 000	14 +	39 %	18 %
USA	1999	Mixte	66 706	12 +	35 %	9%
USA	2000	Mixte	71 764	12 +	34 %	8 %
Royaume-Uni	2000	Mixte	13 021	16-60	27 %	9 %
Danemark	2000	Face-à-face	14 228	16-65	24 %	4 %
France	1999	Téléphone	11 526	15-65	23 %	8 %
Belgique	1998-1999	Téléphone	3 311	18-50	21 %	?
Allemagne	2000	Poste	6 332	18-60	21 %	6 %
Irlande	1998	Poste	10 415	15-65	20 %	9 %
Espagne	1999	Face-à-face	12 488	15-65	20 %	7 %
Pays-Bas	1997	Face-à-face	22 000	15-65	19 %	6 %
Suisse	1997	Téléphone	13 004	15-60	19 %	5 %
Grèce	1998	Face-à-face	3 752	15-65	13 %	4 %
Suède	2000	Face-à-face	2 000	15-65	13 %	1 %
Allemagne (est)	2000	Poste	1 430	18-60	11 %	5 %
Finlande	1998	Poste	2 568	15-70	10 %	3 %
Ontario	2000	Téléphone	2 406	18 +	35 %	10,8 %

Le second tableau porte spécifiquement sur les jeunes.

Prévalence de la consommation chez les jeunes de 15-16 ans, 1995 et 1999 ²⁷

Pays	Prévalence vie		Dernier mois		> 6 fois le dernier mois	
	1995	1999	1995	1999	1995	1999
USA	34 %	41 %	16 %	19 %	7 %	9 %
RU	41 %	35 %	24 %	16 %	9 %	6 %
France	-	35 %	-	22 %	-	9 %
Irlande	37 %	32 %	19 %	15 %	7 %	5 %
Pays-Bas	29 %	28 %	15 %	14 %	6 %	5 %
Italie	19 %	25 %	13 %	14 %	5 %	4 %
Danemark	17 %	24 %	6 %	8 %	1 %	1 %
Norvège	6 %	12 %	3 %	4 %	1 %	1 %
Finlande	5 %	10 %	1 %	2 %	0 %	1 %
Grèce	2 %	9 %	1 %	4 %	0 %	2 %
Portugal	7 %	8 %	4 %	5 %	1 %	2 %
Suède	6 %	8 %	1 %	2 %	0 %	0 %

²⁶ Tableau adapté de Rigter, H. et M. von Laar (2002) « The Epidemiology of cannabis use. » in Pelc, I. (éd.), *International Scientific Conference on Cannabis*. Bruxelles.

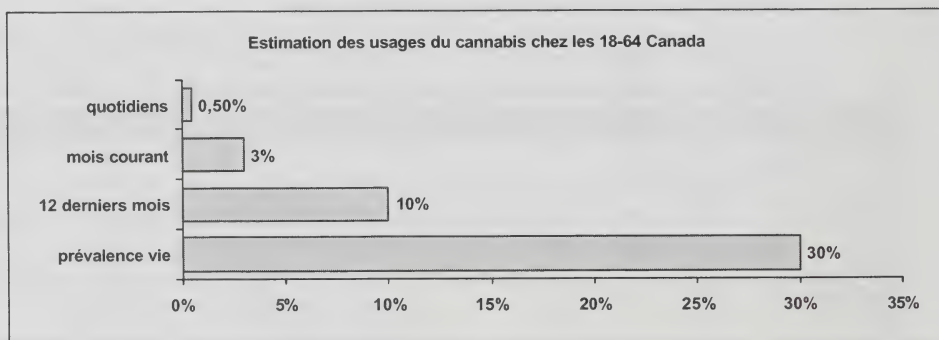
²⁷ Tableau adapté de Rigter et von Laar, *op. cit.*, page 20.

Nous ne disposons pas de données immédiatement comparables pour le Canada. Reprenant les données ontariennes, on se souviendra que 40,7 % des étudiants de 10^e en 1995 et 45 % en 2001 avaient consommé au moins une fois au cours de la dernière année. De même, 19 % en 1995 et près de 25 % en 2001 de l'ensemble des élèves de niveau secondaire consommaient plus de 6 fois par mois. On constate donc que, selon toute vraisemblance, les niveaux de consommation au Canada seraient parmi les plus élevés au monde pour cette classe d'âge.

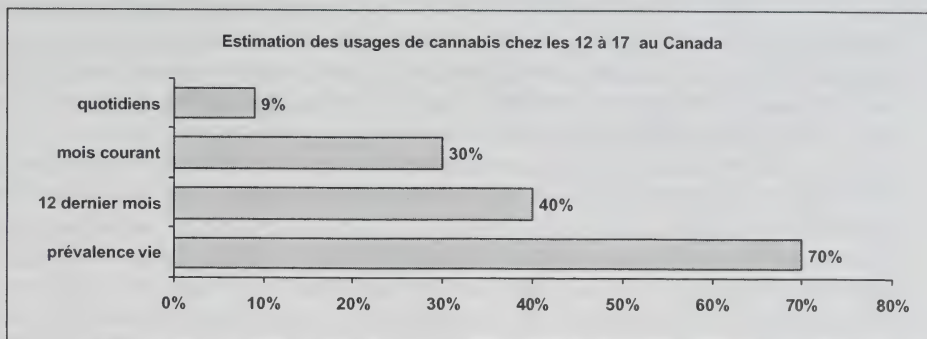
Éléments de synthèse

En l'absence de données récentes fiables sur le plan national, nous ne pouvons que faire des hypothèses. Pour la population de plus de 18 ans, il est permis de penser que la consommation de cannabis se répartirait comme suit :

Si l'on accepte les valeurs présentées dans ce graphique, et se basant sur une population estimée selon le dernier recensement à un peu plus de 20 millions de Canadiens ayant entre 18 et 64 ans, environ 2 millions d'entre eux ont eu au moins une expérience du cannabis au cours des 12 derniers mois, environ 600 000 en ont consommé au cours du dernier mois, et environ 100 000 en consommeraient quotidiennement.



Chez les jeunes entre 12 et 17 ans inclusivement, la situation pourrait ressembler à ce qui suit :



Selon le dernier recensement, la population des 12–17 se situerait à environ 2,5 millions. C’est dire qu’environ 1 million aurait consommé au cours des 12 derniers mois, 750 000 auraient fait usage au cours du dernier mois et 225 000 en feraient un usage quotidien.

Au total, ces tendances épidémiologiques tendent à indiquer plusieurs choses. Au niveau le plus simple, elles démontrent clairement un clivage générationnel et de genre : les personnes de moins de 35 ans consomment davantage que celles de plus de 35 ans et les hommes plus fréquemment que les femmes. Ce sont aussi plus souvent des personnes célibataires. Ces données semblent constantes tant depuis les premières études menées au cours des années 1960 qu’entre pays.

Par ailleurs, on observe aussi des modifications dans la composition des usagers. La part des 30 à 49 tend aussi à augmenter, ce qui pourrait, dans une certaine mesure, conforter l’hypothèse du NIDA selon laquelle on voit arriver ici les premières cohortes des usagers des années 1970. De même, si on avait tendance à identifier les usagers aux personnes de classe ouvrière ou aux chercheurs d’emploi dans les années 60, on note une augmentation chez les personnes ayant un emploi et un niveau d’éducation post-secondaire voire universitaire.

Certains auteurs relient l’usage au fait de vivre dans une zone urbaine – c’est le cas par exemple aux Pays-Bas où l’usage en zone métropolitaine est plus répandu que dans les zones rurales. Ce facteur ne s’applique pas au Canada : en Ontario par exemple, les étudiants à l’extérieur de Toronto consomment plus de cannabis que ceux vivant dans la conurbation torontoise. On associe aussi l’usage de cannabis au fait d’être non pratiquant, de provenir d’une famille où au moins l’un des deux parents a une éducation post-secondaire, et de provenir d’une famille monoparentale.²⁸

L’âge d’initiation pourrait se produire plus jeune que durant les années 70, se situant entre 13 et 15 ans selon les études (environ 14 en moyenne en Ontario) tandis qu’il aurait été plus près des 16 ans. Par contre, l’initiation précoce, comme nous l’avons fait remarquer, serait en recul (2 % contre 8 % au début des années 1980 en

²⁸ Voir Rigter, H. et M von Laar (2002) *op. cit.*

Ontario). Si l'âge d'initiation semble être relié à une consommation régulière à la fin de l'adolescence et au début de l'âge adulte (18 à 25 ans) comme tendrait à l'indiquer les études américaines, il n'en reste pas moins que la consommation diminue avec l'âge et que le taux de discontinuation est élevé. Pour ceux qui continuent à consommer à long terme, l'âge de discontinuation serait repoussé vers la fin de la trentaine.

À un niveau plus complexe, ces tendances pourraient conforter l'hypothèse de l'OFDT d'une « banalisation » de la consommation de cannabis. On verra à la section suivante qu'un certain nombre de chercheurs – de même que des personnes ayant témoigné devant le Comité – imputent cette « banalisation » à une diminution de la perception des risques reliés à la consommation de cannabis (autant les conséquences pour la santé que la possibilité de conséquences judiciaires) et à une augmentation de la disponibilité du cannabis. Au delà d'une banalisation, on pourrait aussi invoquer une forme d'acculturation, au sens où le cannabis en viendrait à faire partie des substances psychoactives comme l'alcool et le tabac, c'est-à-dire des substances dont on apprend à connaître et à gérer les risques.

Au delà encore, on constate que les taux de consommation de cannabis varient largement entre pays sans lien apparent avec les politiques publiques. C'est l'une des hypothèses fortes sur lesquelles nous reviendrons plus amplement lorsque nous examinerons les régimes de politiques publiques au chapitre 20.

FORMES ET MODES D'USAGE

Pourquoi consomme-t-on du cannabis ? En fait, pourquoi les humains ont-ils senti le désir ou le besoin de consommer toutes sortes de substances psychoactives depuis aussi loin que la mémoire remonte ? Ces questions, on s'en doute, sont éminemment chargées de sens symbolique et politique : quand il est question du cannabis, tantôt on insistera sur son aspect « drogue douce », son côté festif et sociable, tantôt on voudra plutôt faire ressortir son inscription dans une trajectoire marginale sinon pré-délinquante et les risques associés au passage vers d'autres drogues. En fait, on connaît somme toute, et étonnamment, bien peu de choses sur les motivations et expériences des consommateurs.

On peut distinguer deux grands groupes d'études : des études socio-anthropologiques cherchant à identifier les pratiques des usagers et certains facteurs du milieu permettant de les mettre en contexte, et des études psychologiques cherchant à relier des facteurs de personnalité et d'origine familiale à la consommation de cannabis. Si les deux types d'études sont tout aussi pertinents pour saisir la nature du phénomène, leurs approches et leurs résultats sont souvent difficiles à concilier. Mais d'abord quelques éléments d'histoire sur les usages du cannabis.

*Le cannabis dans l'histoire*²⁹

Bien que les itinéraires historiques du cannabis demeurent encore obscurs, des archéologues ont découvert un village chinois où l'on retrouverait la plus ancienne utilisation de la plante de cannabis, soit environ 10 000 ans. Elle était principalement utilisée pour faire des vêtements, des câbles et filets de pêche, du papier, et d'autres fins décoratives. Elle était aussi considérée comme l'une des cinq céréales de la Chine. Vers 2 000 avant Jésus-Christ, on se serait aperçu des propriétés psychotropes et médicinales de l'huile (résine) de cannabis, notamment pour traiter les cas de fatigue menstruelle, de goutte, de rhumatisme, de malaria, de constipation, de manque de concentration et comme anesthésiant. On a identifié aussi des utilisations à caractère religieux, notant que son utilisation permettait de communiquer avec les esprits et d'alléger le corps. Au premier siècle avant Jésus-Christ, les taoïstes utilisaient les graines de cannabis dans leurs encensoirs pour provoquer des hallucinations qu'ils considéraient comme une façon d'atteindre l'immortalité.

Plusieurs historiens attribuent l'origine du cannabis aux Scythes vers le VII^e siècle avant J.C. autour de la Sibérie et de l'Asie centrale du Nord. Selon Hérodote, historien grec ayant vécu au cinquième siècle avec le Christ, la marijuana faisait partie intégrale du culte des morts que les Scythes suivaient pour rendre hommage à la mémoire et à l'esprit de leurs chefs disparus. On a aussi retrouvé des traces de consommation de cannabis, souvent à des fins religieuses, chez les Sumériens ainsi que, selon certains, dans certains passages de la Bible.

La première description ethnographique de l'inhalation de marijuana par des peuples anciens comme stimulant psychotrope a été confirmée par un anthropologue russe, Rudenko, en 1929. Non seulement a-t-il trouvé le corps embaumé d'un homme et un chaudron de bronze rempli de graines de marijuana brûlées, mais il a également trouvé des chemises de tissu de fibres de chanvre et des encensoirs métalliques conçus pour inhaler la fumée de marijuana. Cette activité n'était apparemment pas de nature religieuse mais une activité quotidienne à laquelle participaient les hommes comme les femmes, comme le confirmerait la découverte du corps congelé d'une femme de 2 000 ans dans le même cimetière où Rudenko avait fait sa première découverte. Les archéologues ont trouvé enterré dans un tronc d'arbre creux quelques-unes de ses possessions, dont un petit contenant de cannabis qui aurait été fumé pour le plaisir et utilisé dans des rituels.

En Inde, le cannabis est étroitement associé aux coutumes magiques, médicales, religieuses et sociales depuis des milliers d'années. D'après une légende trouvée dans les Vedas, Siva est décrit comme «le Seigneur du bhang» une boisson faite avec des feuilles de cannabis, du lait, du sucre et des épices. Cette boisson fait encore partie des traditions de certaines castes. Le cannabis y est aussi reconnu pour son utilisation dans

²⁹ Cette section s'inspire largement de Spicer, L. (2002) *Utilisations historiques et culturelles du cannabis et le « débat sur la marijuana » au Canada*, Ottawa : Bibliothèque du Parlement, rapport préparé pour le Comité spécial du Sénat sur les drogues illicites. Disponible en ligne à : www.parl.gc.ca/drogues-illicites.asp

les pratiques sexuelles du tantrisme. Environ une heure avant le rituel du yoga, le pratiquant boit un bol de bhang après avoir récité un mantra à la déesse Kali. De même, le « charas » occupe une place particulière dans les cérémonies de prières appelées pujas. Enfin, le cannabis a été utilisé à des fins médicales.

Bien qu'elle ne soit pas originaire de l'Afrique, la plante de cannabis fait partie de traditions religieuses, médicales et culturelles sur presque tout le continent. En Égypte, elle est cultivée depuis plus de 1000 ans, tandis que les premières preuves de sa présence dans les parties centrale et méridionale la situent en Éthiopie du XIV^e siècle où des fourneaux de pipe en céramique contenant des traces de cannabis ont été découverts. En Afrique du Nord, le cannabis a influencé la musique, la littérature et même certains aspects de l'architecture puisque dans certaines maisons une pièce était réservée au kif où les membres de la famille se rassemblaient pour chanter, danser et raconter des récits. La plante était aussi utilisée comme remède contre les morsures de serpent (Hottentots), pour faciliter l'accouchement (Sotho) ou contre l'anthrax, la malaria, la fièvre bilieuse et l'empoisonnement du sang (Rhodésie).

En Amérique du Sud, ce seraient principalement les esclaves importés d'Afrique qui auraient amené le cannabis. Dans les Antilles, notamment en Jamaïque, les travailleurs des Indes orientales ont amené le cannabis, où il est non seulement à usage récréatif mais est intégré à de nombreuses dimensions de la culture jamaïcaine et au culte rastafari notamment.

Quant à l'Amérique du Nord, on ne sait pas au juste quand les propriétés psychotropes du cannabis ont été découvertes. Certains pensent qu'il jouait un rôle dans plusieurs cultures autochtones, d'autres doutent qu'il ait jamais joué un rôle important. La preuve la plus ancienne de l'existence du cannabis en Amérique du Nord remonte à Louis Hébert, apothicaire de Champlain, qui a fait connaître le cannabis aux colons blancs en 1606, essentiellement comme fibre servant à faire des vêtements, des cordages, des voiles et des câbles de bateau. Ses propriétés psychotropes n'auraient cependant été découvertes qu'au XIX^e siècle. Entre 1840 et 1900, il a été utilisé dans la pratique médicale dans presque toute l'Amérique du Nord. Il était prescrit pour diverses affections telles la rage, le rhumatisme, l'épilepsie, le tétanos et comme relaxant musculaire. Son utilisation était d'ailleurs tellement répandue que des préparations de cannabis étaient vendues librement dans les pharmacies.

La première étude du cannabis a été effectuée en 1860 par la *American Governmental Commission*. Le Dr Meens, présentant les constatations de la Commission à la *Ohio State Medical Society* disait :

[Traduction] « Les effets du cannabis sont moins intenses que ceux de l'opium et les sécrétions ne sont pas tout à fait supprimées par son utilisation. La digestion n'est pas perturbée ; l'appétit a tendance à augmenter ; l'effet du chanvre dans son ensemble est moins violent et produit un sommeil plus naturel, sans nuire au fonctionnement des organes internes ; il est certainement préférable à l'opium dans bien des cas et il ne se compare pas à cette drogue sur les plans de la force et de la fiabilité. »³⁰

³⁰ Cité dans Spicer, *op. cit.*, page 29.

En même temps, d'autres médecins critiquaient son utilisation en raison de la variabilité et de l'incertitude de ses effets. Quant à ses utilisations récréatives, elles semblent avoir été notées pour la première fois au début du XXe siècle, et ont rapidement fait l'objet de préoccupations sociales, notamment en raison de l'association du cannabis aux travailleurs mexicains puis aux noirs américains, renforçant des craintes quant à ses effets criminogènes et aphrodisiaques. La Californie a été le premier état à prohiber la possession de cannabis en 1915. Le Canada en a fait autant en 1923, tandis que les États-Unis en interdisaient la possession à partir de 1937. Pourtant, dès 1944, le rapport *La Guardia*, de l'État de New York, insistait sur les effets inoffensifs du cannabis. Il sera suivi des rapports de la Commission Le Dain au Canada et de la Commission Schafer aux États-Unis au début des années 1970. Sur la scène internationale, le cannabis était interdit par la Convention unique de 1961 (dont il sera plus amplement question au chapitre 19).

Au Canada, l'utilisation massive du cannabis s'est manifestée à partir des années 1960. Auparavant, le phénomène était à peu près invisible et il n'y avait eu que 25 condamnations pour possession de cannabis entre 1930 et 1946. En 1962, la GRC rapportait 20 cas liés au cannabis. Puis ce fut l'explosion que l'on connaît : 2 300 cas en 1968 et 12 000 condamnations liées au cannabis en 1972. Selon la Commission Le Dain, on peut attribuer l'évolution soudaine de l'utilisation du cannabis aux hippies, à la guerre du Vietnam, aux journaux clandestins, et à l'influence des mass média. S'ajoute à ces grands courants de contre-culture l'ouverture sur le monde dans les deux sens : de plus en plus de jeunes Canadiens voyagent, cependant que le Canada reçoit lui aussi de plus en plus de visiteurs et d'immigrants. Depuis lors, à l'exception de quelques années, l'utilisation du cannabis à des fins non médicales s'est accrue, comme nous l'avons vu dans la section précédente.

Trajectoires d'usages

La plupart des études distinguent les usages selon les quantités et la fréquence de consommation. Ainsi par exemple, le rapport de l'OFDT, comme nous l'avons vu à la section précédente, distinguait entre les usages (expérimental, occasionnel, répété, régulier et intensif), la fréquence de la consommation (nombre de fois par mois) et ses modalités (seul ou en groupe, le matin ou le soir) étant des indicateurs privilégiés pour les usages à risque. Pourtant, cette connaissance de certaines caractéristiques de la consommation, notamment chez les jeunes, indique peu de choses sur la suite. Arrêtant le temps à un moment donné de l'histoire de l'utilisateur, elles ne permettent pas de savoir ce qui se passe ensuite. Ces données ne permettent pas, par exemple, de répondre à la question de savoir si une consommation de cannabis initiée à l'adolescence s'inscrit sur une trajectoire qui mène vers une consommation accrue. Or, un certain nombre d'intervenants qui ont témoigné devant le Comité nous ont dit observer une dépendance chez les usagers de cannabis. De même, certains documents

gouvernementaux, aux USA notamment, n'hésitent pas à pointer dans cette direction en mesurant la demande de traitement et en rapportant que la demande de traitement pour dépendance au cannabis est en augmentation. Par exemple, des documents que nous ont remis les responsables américains sur les drogues indiquent que 40 % des personnes dépendantes selon les critères diagnostics du DSM IV (dont il sera question au chapitre suivant) ont un diagnostic primaire de dépendance au cannabis.³¹ À moins de penser que la dépendance s'installe après quelques usages occasionnels, force est de penser qu'un nombre relativement important de jeunes qui s'initient au cannabis à l'adolescence poursuivront une trajectoire d'usagers qui les mènera à la dépendance.

Mais qu'en est-il vraiment ? Quelles sont les trajectoires des usagers ? Quelles en sont les étapes ? Peut-on discerner une progression ?

Soulignons d'abord, avec le professeur Mercier, que la notion de trajectoire est elle-même un peu inexacte.

« La notion de trajectoire est d'abord basée sur le principe de base que les individus passeront par un certain nombre d'étapes ou de phases successives. Il est vrai que la notion de trajectoire est un peu fautive. Une trajectoire est un peu une métaphore de la trajectoire des planètes et des étoiles, c'est-à-dire quelque chose de très orienté et dans un mouvement continu. Le mot « trajet » serait plus juste. Dans un trajet, il y a des détours et des allers-retours, etc. Il faut donc garder à l'esprit que cette notion de trajectoire n'est pas nécessairement linéaire, mais qu'il y aura différentes modalités et différents sentiers, « journeys » est le terme le plus juste pour décrire les rapports qu'un individu aura avec les substances psychotropes au cours de sa vie. Il y a aussi une autre notion importante. On parle de trajectoires, de phases, d'étapes, mais il y a des transitions, des moments charnières où les individus passeront d'une étape à une autre. »³²

Certains, comme le rapport de l'INSERM, parlent de phases de contact, d'expérimentation, et d'engagement. Le contact c'est le fait de connaître des personnes qui en consomment ou de voir du cannabis. L'expérimentation, c'est bien sûr le fait d'essayer, qui peut se limiter à une seule fois. Enfin, l'engagement réfère à diverses modalités de gérer l'usage, allant de l'engagement relatif où l'usage subit des variations importantes à l'engagement réel où il y a moins de variations. Le rapport précise que ces trois étapes ne se présentent pas dans toutes les trajectoires ni ne se succèdent toujours de manière cohérente. De surcroît, il y aura souvent des périodes d'arrêt, suivies de reprise ou d'un arrêt définitif. Néanmoins, selon l'INSERM, *« les engagements constituent probablement l'étape la plus importante si l'on désire comprendre à quoi correspondent les usages du cannabis. C'est cependant sur ces engagements que les données semblent les plus inconsistantes, la plupart des travaux portant sur l'initiation. »³³*

³¹ Office of National Drug Control Policy (2002) *National Drug Control Strategy*. Washington, DC : The White House.

³² Professeure Céline Mercier, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 10 décembre 2001, fascicule no 12, page 6.

³³ INSERM (2001) *op. cit.*, page 28.

En effet, les données sur l'engagement dans une utilisation demeurent très fragmentaires de sorte qu'au delà de quelques généralités on connaît somme toute peu de choses sur les modalités et trajectoires d'usage du cannabis. En fait, tout se passe comme si l'on était d'abord préoccupé de classifier les usagers selon le degré de risque de dépendance qu'ils présentent, ou de leur appliquer un modèle déjà tout fait. Lors de son témoignage devant le Comité, la professeure Mercier a rappelé les cinq étapes du schéma classique de la toxicomanie : initiation, installation progressive dans l'abus, dépendance, traitement et réinsertion. Pourtant, comme elle le souligne, ce n'est là qu'une des trajectoires possibles, celle qui a été la plus fréquemment étudiée en matière de drogues (notamment alcool, héroïne et cocaïne), et qui cependant ne s'applique que très peu au cas du cannabis. Il est certain en tout cas qu'il y a, au sein des usagers de cannabis, une grande variabilité d'usages.

Les données épidémiologiques présentées à la section précédente indiquent déjà que la consommation de cannabis diminue de façon importante avec l'âge. Plus précisément, le taux de discontinuation est important comme le démontre le tableau suivant.

Taux de discontinuation (pourcentage des usagers vie qui n'ont pas consommé au cours de l'année précédente), USA, 1996³⁴

Groupe d'âge	Femmes	Hommes
12-17	26 %	20 %
18-25	54 %	39 %
26-34	82 %	74 %
35 +	91 %	82 %

À l'opposé, le taux de continuation est relativement faible : il est de 24 % aux USA en 2000, 17 % au Danemark, 29 % en France et en Allemagne (ouest), 24 % en Suisse et 8 % en Suède. La seule exception est l'Australie avec un taux de continuation de 46 %.

Ceci étant, ces données ne disent rien de la durée pendant laquelle se poursuit cette continuation de la consommation de cannabis ni de la fréquence de l'usage ni des quantités consommées. Les études épidémiologiques tendent à établir que la plupart des usagers discontinuent au cours de la trentaine, mais seules des études de type ethnographique peuvent nous renseigner davantage. Malheureusement il en existe peu.

Le rapport de l'INSERM décrit des études menées en Australie, en France, et aux États-Unis. La plupart révèlent l'évolution vers des usages régulés du cannabis, c'est-à-dire des usages à la fois stabilisés – moins de variations dans les consommations – et

³⁴ Rigter, H. et M. von Laar, *op. cit.*, page 27.

des usages qui sont plus intégrés aux conditions sociales d'existence, c'est-à-dire à la vie de couple et à la vie professionnelle. Une proportion importante des consommateurs réguliers sur la longue durée sont des hommes, ont plutôt tendance à être célibataires et à travailler dans des professions liées à la création. La plupart disent consommer pour relaxer et soulager le stress, favoriser le sommeil, ou modifier leurs états de conscience.³⁵

Au Canada, Hathaway a mené une étude sur des consommateurs réguliers.³⁶ Menée sur base d'entretiens qualitatifs entre octobre 1994 et juin 1995, l'étude porte sur un échantillon de 30 consommateurs réguliers (15 hommes et 15 femmes) âgés entre 22 et 47 ans (moyenne de 32 ans). Les participants avaient consommé pendant des périodes entre 3 et 31 ans, la moyenne étant de 17 ans ; 40 % avaient fait un usage quotidien pendant 20 ans ou plus. Ses données vont largement dans le sens de ce que suggère l'INSERM. Les consommateurs au long cours intègrent leur consommation régulière de cannabis à leur vie quotidienne et à leurs activités sociales tout en conservant la conscience de la valeur symbolique de cette «déviance tolérée». Si la plupart ont commencé au contact d'un petit groupe d'usagers qui a pu leur servir plus ou moins longtemps de support, les consommateurs les plus en harmonie avec leur usage de la drogue sont ceux qui ont développé une régulation autonome de leur usage.

[Traduction] « Dans cette étude, j'ai observé que le passage d'un mode de consommation dépendant du niveau de participation aux usages de groupe à un mode régulé de manière autonome est crucial dans la relation entretenue avec la marijuana. (...) l'usage continu de la drogue ne signifie pas une incapacité à s'engager dans des rôles adultes conventionnels. Plutôt, la capacité d'adapter l'usage de marijuana aux autres dimensions d'une vie par ailleurs conventionnelle rend la pratique plus signifiante sur un plan personnel que les pratiques antérieures dépendantes de l'appartenance au groupe d'usagers. »³⁷

Cette acculturation de la drogue se produira, pour un certain nombre d'usagers, après une période d'abstinence plus ou moins prolongée pendant laquelle ils prendront leur distance par rapport au groupe d'usagers. Il leur est alors possible de définir pour eux-mêmes la place de leur consommation dans leur vie. Tous les participants à l'étude avaient d'ailleurs réussi à intégrer leur consommation à leur situation de vie familiale ou professionnelle. Les usagers associent leur consommation de drogue principalement aux temps libres et à la relaxation après une journée de travail, certains la comparant à la place de l'alcool. Bien que 97 % en faisaient un usage au moins hebdomadaire et 37 % un usage quotidien, seulement 7 % (2 personnes) définissaient leur usage comme problématique. La plupart passaient par des périodes d'abstinence ou de diminution de leur consommation sans ressentir de difficultés.

³⁵ INSERM (2001), *op. cit.*, pages 55-58.

³⁶ Hathaway A. D. (1997a) «Marijuana and lifestyle : exploring tolerable deviance. » *Deviant Behavior : An Interdisciplinary Journal*, 18, pages 213-232 ; et (1997b) «Marijuana and tolerance : revisiting Becker's sources of control. » *ibid.*, pages 103-124.

³⁷ Hathaway, A.D. (1997a), *op. cit.*, page 219.

Une autre étude, rapportée par Rigter et von Laar,³⁸ a été menée dans l'État de New York sur une cohorte de consommateurs suivis sur une période de vingt ans. Cette étude a permis d'identifier quatre types de consommateurs :

- Début précoce / usage intensif : commencent vers 15 ans et deviennent des usagers réguliers vers 17,5 ans; connaissent une consommation quotidienne en moyenne pour une durée de 131 mois; 49 % consomment encore vers 34-35 ans ;
- Début précoce / usage léger : commencent vers l'âge de 15 ans mais sont moins nombreux (44 %) à passer à un usage quotidien (d'une durée de 28 mois en moyenne); seuls 10 % d'entre eux consomment encore à 34-35 ans ;
- Début médian / usage intensif : commencent vers 16 ans; deux tiers deviennent usagers quotidiens (durée moyenne de 42 mois) et consomment encore à l'âge de 34-35 ans ;
- Début tardif / usage léger : commencent à l'âge de 19,5 ans et une minorité deviennent usagers journaliers (21 %). Presque tous discontinuent vers 34-35 ans.

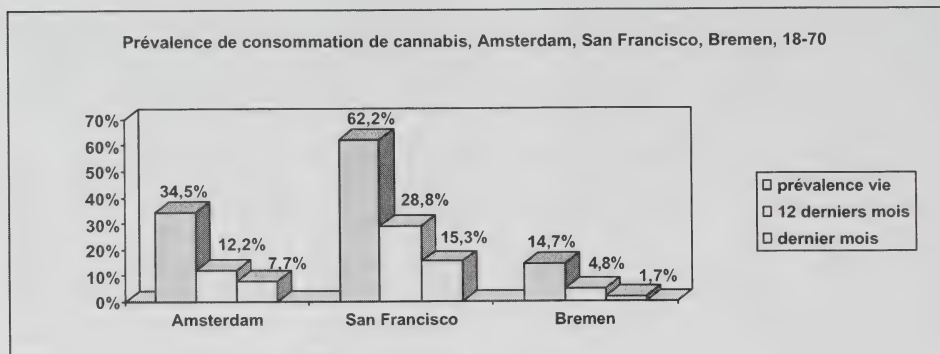
Au total, l'étude démontrait qu'il y avait nettement plus d'usagers légers que d'usagers intensifs. Ceux-ci avaient une scolarité inférieure, allaient moins souvent à l'église, avaient un passif délinquant plus fréquent, et changeaient plus souvent d'emploi. Les usagers précoces démontraient une tendance plus élevée à des épisodes de délinquance et des désordres mentaux, avaient commencé à boire et à fumer du tabac plus tôt, avaient davantage tendance à expérimenter d'autres drogues, et une tendance à identifier des raisons positives pour consommer de la marijuana.

Mais il est risqué de proposer des typologies car les frontières sont fluides et les usagers passent d'un type de consommation à l'autre assez facilement. C'est ce que démontre notamment l'étude comparative de Cohen et Kaal menée à Amsterdam, San Francisco et Bremen.³⁹

³⁸ Rigter, H. et M. von Laar, *op. cit.*, pages 28-29.

³⁹ Cohen, P.D.A. et H.L. Kaal, (2000) *The irrelevance of drug policy. Patterns and careers of experienced cannabis use in the population of Amsterdam, San Francisco and Bremen.* Amsterdam : University of Amsterdam, CEDRO.

L'étude porte sur un échantillon de consommateurs expérimentés composé de 216 personnes à Amsterdam, 265 à San Francisco et 55 à Bremen. L'intérêt de la méthode sophistiquée de sélection des répondants à partir des enquêtes épidémiologiques menées en population générale pour ces villes est de permettre d'établir la prévalence de l'usage. La figure suivante reproduit ces données.



L'âge moyen des participants variait entre 33 et 37 ans, la plupart avaient un conjoint et un emploi stable. L'âge moyen d'initiation au cannabis dans les trois villes était de 16 ans, soit à un plus jeune âge que chez les personnes qui n'ont qu'une exposition occasionnelle au cannabis (21,2 à Amsterdam, 19,5 à Bremen). La plupart ont été initiés par des amis et ont consommé en groupe lors de leur première expérience. À 19 ans, ils en faisaient un usage régulier (au moins une fois par mois) et leur usage le plus intensif était vers 21,5 ans. Les trajectoires d'utilisation ont été déterminées à partir de six modèles :

- 1) Du plus vers le moins : après une période de consommation intense au début, la personne diminue graduellement sa consommation.
- 2) Graduellement plus : la personne augmente régulièrement son usage.
- 3) Stable : les quantités et la fréquence n'ont pas changé.
- 4) Up top down : la consommation augmente, atteint un plateau et diminue ensuite.
- 5) Intermittente : arrêts fréquents après l'initiation.
- 6) Variable : consommation en dents de scie.

Comme l'indique le tableau suivant, pas moins de 75 % des répondants dans les trois villes correspondent aux modèles 4 (48,7 %) et 6 (25 %).

Modèles de consommation chez les usagers réguliers⁴⁰

	Amsterdam		San Francisco		Bremen	
	Nombre	%	Nombre	%	Nombre	%
Modèle 1	17	8	18	7	-	-
Modèle 2	13	6	17	6	6	11
Modèle 3	24	11	5	2	5	9
Modèle 4	104	48	133	50	24	44
Modèle 5	7	3	25	9	2	4
Modèle 6	51	24	66	25	18	33

À la période la plus intense de leur consommation, environ 45 % consommaient régulièrement. Par ailleurs, au cours de la dernière année, environ 35 % consommaient moins d'une fois par semaine et plus de 35 % pas du tout. Au cours des trois derniers mois, plus de 50 % n'ont pas consommé du tout, et moins de 10 % consommaient sur une base journalière. Quant aux quantités, les auteurs de l'étude concluent qu'ils sont faibles : à leur période d'usage intensif, moins de 18 % fumaient plus d'une once par mois, tandis qu'au cours de la dernière année, environ 60 % fumaient moins de 4 grammes (1/7 once) par mois. Les usagers se répartissent à peu près également entre ceux qui préfèrent un cannabis moyen ou doux et ceux qui préfèrent une variété plus puissante (avec une plus nette préférence pour les variétés douces à Amsterdam). Les usagers entourent leur consommation d'un certain nombre de règles : ne fument pas au travail ou à l'école (plus de 35 %), durant le jour, ou le matin.

La plupart des usagers au long cours ont eu des périodes d'abstinence variant entre un mois et un an ou plus, le plus souvent parce qu'ils ne sentent plus le besoin ou le goût de fumer. Par ailleurs, entre le tiers et la moitié ont décidé de réduire leur consommation à divers moments.

On voit donc que les trajectoires des usagers ne suivent pas une progression linéaire, qu'elles sont marquées par des périodes clés d'intégration de la consommation aux dimensions de la vie sociale et personnelle, de distanciation par rapport au groupe d'usagers, de stabilisation de la place de la marijuana dans la vie personnelle, avec des périodes de consommation intenses surtout en début de trajectoire suivies de périodes soit de diminution, soit de hauts et de bas en termes de fréquence et de quantités.

Facteurs reliés à l'usage

Faisant suite logiquement avec ce que nous avons vu à la section précédente, les études sur les facteurs pouvant expliquer l'usage de drogues, de cannabis en particulier, portent principalement sur l'initiation ou l'expérimentation.





Le rapport de l'INSERM examine un ensemble d'études sur les facteurs pouvant expliquer l'usage de cannabis : l'influence du milieu familial (usage par les parents,

⁴⁰ *Ibid.*, page 48.

socialisation, modes éducatifs parentaux, qualité des liens parents enfants, modèles parentaux), des pairs (valeurs symboliques de la consommation, normes), et des milieux scolaire et social.⁴¹ Il n'en tire pas de conclusion claire, mais note que les études arrivent peu ou mal à tenir compte de l'inscription des usagers dans des milieux sociaux et conséquemment des impacts différentiels sur l'usage tenant de la variabilité des stress sociaux ainsi que des modalités d'intégration. Ajoutons aussi que ces études ne tiennent pas compte des trajectoires d'usage.

Observons d'abord avec *Drugscope* que l'approche épidémiologique à l'analyse de la consommation de drogues, de cannabis en particulier, repose sur un modèle médical d'analyse de la prévalence de maladies, alors que les raisons (qui ne sont pas nécessairement des causes) à l'usage de drogues peuvent très bien être étrangères au domaine médical et plus largement au modèle psychosocial. L'attribution de la dépendance – entendue ici au sens d'une maladie – à des facteurs tenant à la relation entre le lieu de contrôle (*locus of control*) et l'environnement a des conséquences aussi bien pour la compréhension du phénomène que pour les politiques publiques. Le rapport de cet organisme britannique présente un tableau des explications de l'usage de drogues que nous croyons utile de reproduire ici.

Attributions pour expliquer l'usage de drogues⁴²

Attribution	Explication de sens commun	Politiques publiques en découlant
Interne x stable 	L'usage de drogues est une maladie (modèle de la dépendance)	Modèle du traitement
Interne x instable 	L'usage de drogues est la recherche périodique du plaisir	Modèle de réduction de la demande (remplacer les drogues par autre chose)
Externe x stable 	Des carences dans l'environnement expliquent l'usage de drogues	Modifier l'environnement
Externe x instable 	La disponibilité des drogues explique l'usage	Modèle de la réduction de l'offre

Il ne faut pas perdre de vue en effet qu'en matière de substances psychoactives, le modèle médical de la maladie est encore un modèle de compréhension dominant et qu'il forme l'autre partie de la réponse publique avec le modèle pénal.⁴³ Comme on nous l'a répété à plusieurs reprises, les drogues, le cannabis en particulier, ne sont pas dangereuses parce qu'elles sont illégales, mais elles sont illégales parce que dangereuses.

⁴¹ INSERM (2001) *op. cit.*, pages 28-50.

⁴² DrugScope (2001) *United Kingdom. Drug Situation 2000*. Report to the EMCDDA, page 19.

⁴³ Là dessus, voir par exemple les travaux de Bergeron, H. (1996) *Soigner la toxicomanie. Les dispositifs de soin entre idéologie et action*. Paris : L'Harmattan; et Barré, M.D., M.L. Pottier et S. Delaître (2001) *Toxicomanie, police, justice : trajectoires pénales*. Paris : OFDT.

Nous aurons l'occasion de commenter cette affirmation plus amplement dans les chapitres suivants.

Pour l'instant, il suffit de retenir que les tentatives d'explication de l'usage de drogues passent le plus souvent par la recherche de déficiences dans la personnalité ou dans l'environnement plutôt que par une recherche de compréhension des choix faits par les usagers.

Parmi les facteurs reliés au lieu de contrôle, les études identifient principalement :

- L'influence des pairs : les premiers usages seraient fonction de l'influence d'autres jeunes dans l'entourage ;
- L'influence du milieu familial : un milieu familial où la supervision parentale ferait défaut, où la consommation de drogues serait tolérée, où des membres de la fratrie ou les parents seraient criminalisés, et où les parents sont eux-mêmes consommateurs ;

Parmi les facteurs reliés à l'environnement, les études citent :

- La disponibilité et l'accessibilité des drogues : plus les drogues sont disponibles, plus la consommation sera élevée ;
- La tolérance sociale : plus l'usage de drogues est accepté, plus les niveaux de consommation seront élevés ;
- La perception du risque : moins les risques de désapprobation sociale, ou les risques perçus sur la santé, ou les risques de judiciarisation sont élevés, plus la consommation sera élevée.

Selon le rapport *Monitoring the Future* il ne fait pas de doute que les perceptions et attitudes qu'ont les jeunes à l'égard des drogues sont déterminantes des niveaux de consommation, ce qui en retour doit déterminer les politiques publiques :

[Traduction] « *Au début des années 1990 nous avons observé une augmentation de l'usage d'un certain nombre de drogues illicites chez les élèves de niveau secondaire et des changements importants de certaines attitudes et croyances clés relativement à l'usage de drogues. (...) Spécifiquement, la proportion d'entre eux qui considéraient que l'usage de drogues présentait des risques avait commencé à diminuer ainsi que la proportion de ceux qui étaient en désaccord avec l'usage. Comme nous l'avions alors prédit, ces changements annonçaient la fin de l'amélioration de la situation des drogues que la nation avait fini par prendre pour acquise. L'usage de drogues illicites augmenta significativement à chacun des trois niveaux après 1992, tandis que les attitudes et opinions négatives continuaient de prendre du plomb dans l'aile. Cette tendance s'est poursuivie pendant quelques années.* » ⁴⁴

Et plus loin :

⁴⁴ Johnston, L.D., et coll., (2001) *op. cit.*, page 6.

[Traduction] « Nous pouvons résumer les données sur les tendances comme suit : pendant plus d'une décennie – de la fin des années 1970 au début des années 1990 – l'usage de drogues illicites avait diminué de façon appréciable chez les élèves de douzième année, et de manière encore plus importante chez les étudiants de collège et les jeunes adultes. Ces améliorations substantielles – qui semblent largement explicables par des modifications dans les attitudes au sujet de l'usage de drogues, les croyances relatives aux risques associés à l'usage, et les normes des pairs – ont des implications très importantes en ce qui concerne les politiques. La première est que les comportements d'usage des jeunes américains sont malléables – ils peuvent être modifiés. Cela a été fait auparavant. La seconde est que les facteurs relatifs à la demande semblent avoir joué un rôle déterminant dans les modifications constatées. Les niveaux de disponibilité de la marijuana tels que les rapportent les élèves de fin du cycle secondaire sont demeurés relativement stables au cours de la période de l'étude. (De plus, les abstinentes et ceux qui discontinuent l'usage disent que ni le prix ni la disponibilité ne sont des raisons importantes dans leurs décisions.) D'ailleurs, la perception de la disponibilité de la cocaïne augmentait tandis que l'usage de cocaïne et de crack chutait brutalement et que les risques associés à l'usage de ces drogues augmentaient significativement. (...) Au fil des ans, cette étude a démontré que les changements dans les risques perçus et la désapprobation de l'usage ont été des causes de modification dans les niveaux d'usage de diverses drogues. Ces croyances et ces attitudes sont certainement influencées par le niveau et la nature des messages publics au cours de la période de croissance de ces jeunes. La diminution significative de l'intérêt porté à la question des drogues au début des années 1990 peut aider à expliquer pourquoi la perception des risques et la désapprobation chez les adolescents ont commencé à diminuer. »⁴⁵

En d'autres termes, la désapprobation sociale – par les campagnes gouvernementales d'information par exemple – peut générer des attitudes de rejet de l'utilisation qui seront renforcées par des actions susceptibles d'augmenter les risques reliés à l'utilisation (par exemple les risques d'arrestation).

On trouve un exemple d'application de cette approche au Canada dans une étude réalisée à Terre-Neuve et Labrador sur un échantillon de 3 293 personnes.⁴⁶ Le questionnaire comportait des questions sur les activités (en famille, travail domestique, activités parascolaires, travail scolaire, sports, travail, vie religieuse), la disponibilité du cannabis, l'utilisation par les parents, les pairs, et soi-même, les normes parentales et des pairs sur l'utilisation du cannabis, les préférences et normes personnelles sur le cannabis. L'analyse de variance porte sur l'interaction entre ces diverses variables pour expliquer l'usage personnel de cannabis. Le modèle dans son ensemble n'explique que 57 % de l'usage sur l'échantillon provincial, dont 65 % pour les garçons et 54 % pour les filles. Les résultats montrent que l'utilisation par les pairs est le principal facteur relié à l'usage personnel (29 % de la variance), suivi par les préférences personnelles (elles-mêmes influencées par les normes des pairs), les normes personnelles et le fait d'avoir des tâches domestiques. La disponibilité n'est pas directement reliée à l'usage et passe par l'usage et les normes des pairs. L'usage parental est fortement relié à la

⁴⁵ *Ibid.*, page 30.

⁴⁶ Wasmeier, M., et coll., (2000) *Path analysis survey of substance use among Newfoundland and Labrador Adolescents. Marijuana / hashich and Solvent use*. Memorial University of Newfoundland.

disponibilité perçue. Les auteurs concluent que ce modèle a des implications claires pour les interventions visant à prévenir l'usage de cannabis :

[Traduction] « Dans l'échantillon provincial, l'usage par les pairs, les normes des pairs, la disponibilité, les préférences personnelles et les normes personnelles comptent pour 56 % de 57 % d'usage personnel prédit par le modèle. Les normes des pairs et la disponibilité passent par l'usage par les pairs, de sorte que les normes personnelles, les préférences personnelles et l'usage par les pairs sont des cibles importantes pour les interventions. Parmi ces variables, les préférences personnelles et l'usage personnel sont celles qui contribuent le plus à la prédiction de l'usage personnel, comptant ensemble pour 48,8 % de la variance. Il est intéressant de noter qu'une partie importante de la disponibilité est prédite par l'usage parental, suggérant que l'usage de cannabis ou de haschich chez les pairs proviendrait de source parentale. Il s'agit là d'une cible pour les stratégies d'intervention. Le modèle suggère que les sources d'influence sur les variables cibles devraient faire partie de toute stratégie d'intervention. »⁴⁷

Tenant compte des limites du modèle ainsi que de la différenciation entre les genres et les districts de santé de la province quant au poids relatif des variables explicatives, il faut se demander si ce type d'analyse reflète adéquatement les usages, incluant les premiers usages. De plus, au vu des tendances internationales d'usage d'une part, ainsi que des études sur les usagers d'autre part, on peut s'interroger sur les postulats de ce type de modèle mécanique basé sur une rationalité des acteurs.

Enfin, Aquatias et coll. ont réalisé une étude sur l'usage du cannabis dans les cités de la banlieue parisienne.⁴⁸ L'intérêt de cette étude tient à la distinction fine que les auteurs font entre les formes d'usage du cannabis sur le double registre des caractéristiques des usagers d'une part et du discours idéologique d'autre part. Les auteurs montrent à la fois qu'il existe des usages durs d'une drogue douce et que les usages des classes moyennes, associés le plus souvent dans l'imaginaire collectif aux formes d'usage convivial, en groupe et intégrés, tandis que ceux des jeunes des banlieues sont associés à l'excès et à la dérégulation, ne correspondent pas à la réalité des faits. Les uns comme les autres, en fonction des facteurs de leur environnement, développeront des usages régulés aussi bien que dérégulés.

L'étude révèle en effet qu'à côté de l'indétermination sociale reliés aux conditions d'existence dans la cité et de l'intégration professionnelle, des facteurs relatifs aux pressions du milieu de vie et à la capacité de conserver ou non une certaine autonomie par rapport aux sociabilités locales jouent un rôle important dans la détermination des modes et formes d'usage.

⁴⁷ Ibid., page 15.

⁴⁸ Aquatias, S., (1999) « Usages du cannabis et situations sociales. Réflexion sur les conditions sociales des différentes consommations possibles de cannabis. » in Faugeron, C. (éd.) *Les drogues en France*. Paris : Georg. Pour l'étude originale : Aquatias, S. et coll. (1997) *L'usage dur des drogues douces, recherche sur la consommation de cannabis dans la banlieue parisienne*. Paris : OFDT.

« Nous avons essayé de comprendre ce qui fondait ces différents usages et noté combien l'indétermination sociale – l'absence de valorisation sociale et de ressources monétaires suffisantes pour acquérir une relative autonomie – qui touche ces jeunes joue sur leurs parcours de fumeurs de cannabis.

Pourtant, dans de même situations de faible accès au marché du travail et aux ressources, certains fument sans excès, d'autres pas du tout et d'autres consomment de façon outrancière. De même, parmi ceux qui travaillent, certains consomment de manière conséquente et avec régularité du cannabis à fort taux de principe actif et d'autres ont des usages régulés et relativement faibles.

L'indétermination sociale est bien sûr un facteur explicatif des usages les plus importants, de même que l'intégration professionnelle apparaît bien comme un facteur de régulation des pratiques. Mais ces deux facteurs, chacun étant le versant de l'autre, ne constituent que le contexte global des comportements de consommation prolongée et intensive du cannabis.

(...)

Parmi les personnes en situation d'indétermination sociale, celles qui consomment de manière importante et prolongée sont aussi celles qui, dans la cité, sont soumises aux plus fortes tensions sociales, que ce soit des problèmes de réputation, des suivis judiciaires, des problèmes familiaux... (...).

Au contraire, ceux qui régulent leurs consommations sont ceux qui sont à la fois bien intégrés à la vie de la cité et qui ont réussi à préserver une certaine autonomie par rapport aux sociabilités locales. »⁴⁹

L'étude propose une grille de lecture⁵⁰ des usages que nous reproduisons ici d'autant plus qu'elle nous inspirera pour notre propre classification des usagers.

	Usages régulés solitaires	Usages régulés en groupe	Usages solitaires dérégulés	Usages déréglés en groupe
Consommation forte	Après le travail	Ennui	Problèmes personnels	Festivités, vacances
Consommation moyenne ou faible	Avant le travail	Consommation courante de soirée		
	Après le travail	Ennui		

Notons finalement que l'étude distingue entre quatre types de consommation :

- Consommation ponctuelle qui va de l'initiation aux usages récréatifs ;
- Consommation quotidienne modérée : de 3 à 5 joints par jour soit environ un gramme ;
- Consommation quotidienne conséquente (ou forte) : 5 à 6 joints par jour, soit entre 0,9 et 1,2 grammes ;
- Consommation quotidienne intensive : plus de 1,2 gramme par jour.

⁴⁹ Aquatias, S. (1999) *op. cit.*, pages 48-49.

⁵⁰ *Ibid.*, page 45.

Éléments de synthèse

Nous retenons principalement de l'analyse des histoires de vie des consommateurs et de leurs « trajectoires » que pour cette proportion variant entre 15 % et 20 % des expérimentateurs qui s'installeront dans une consommation régulière, les modalités et formes de cette « carrière » d'usager sont effectivement très variables mais que, pour une proportion importante de ces usagers au long cours, la consommation est intégrée à la vie sociale et personnelle.

Par ailleurs, et contrairement à ce que laissent penser un certain nombre de travaux de recherche, la consommation de cannabis n'est pas déterminée par une série de caractéristiques uniquement individuelles ou d'ordre psychologique, mais ni non plus uniquement d'ordre environnemental. Quel que soit le milieu d'appartenance, des circonstances qui demeurent pour partie ponctuelles et propres à l'histoire de chacun mènent parfois à des usages dérégulés, caractérisés notamment par une consommation intensive et en solitaire. Cette installation dans des usages dérégulés semble la plupart du temps temporaire mais nous n'avons pas croisé d'étude qui permettrait de conclure là dessus.

D'autre part, nous observons aussi que les attitudes sociales envers le cannabis ainsi que les caractéristiques du marché du cannabis semblent avoir peu d'impact sur les tendances de consommation.

Enfin, et surtout, nous retenons que l'installation dans une trajectoire d'usage régulier ne signifie pas nécessairement usage à problème. En même temps, il est vraisemblable qu'une initiation précoce et une installation hâtive dans une consommation régulière peuvent être des facteurs de risque vers une situation de consommation à problème. Pour le dire autrement, et ce sera important pour les choix de politiques publiques et d'interventions, l'âge précoce à l'initiation (moins de 16 ans) et l'installation hâtive dans une consommation quotidienne (moins de 20 ans) sont des marqueurs qui devraient servir au dépistage et à la prévention des consommations abusives. Nous y reviendrons au chapitre 7.

UNE ESCALADE VERS D'AUTRES DROGUES ?

La question de l'escalade (ou de l'introduction) occupe une place importante dans les débats sur la marijuana. L'on craint en effet que la consommation de cannabis ne mène vers la consommation d'autres drogues, notamment les drogues dites dures telles l'héroïne ou la cocaïne.

« La conséquence logique est que la hausse de la consommation de drogues entraînera une augmentation du nombre de personnes qui en subiront les conséquences. On pense que le cannabis est la drogue avec laquelle la plupart des jeunes s'initient à la consommation d'autres drogues. (...) Le concept de passerelle existe depuis longtemps et même si l'on ne possède aucune preuve concluante, le National Institute on Drug Abuse a signalé que d'après les résultats de recherches neurotoxologiques la marijuana pourrait altérer le cerveau au point d'accroître la vulnérabilité à d'autres drogues. De nombreuses personnes estiment que la consommation de cannabis est un point de départ pour ceux et celles qui cherchent à accentuer les effets psychotropes d'une drogue. »⁵¹

Il convient d'abord de clarifier les termes. La version de l'escalade (*stepping stone* en anglais) soutient que la consommation de cannabis mène inexorablement vers la consommation d'autres drogues. Dans cette version, la consommation de cannabis entraînerait des modifications neurophysiologiques, affectant notamment le système dopaminergique (autrement appelé le système de récompense) créant ainsi le besoin de passer à la consommation d'autres drogues. Cette théorie a été amplement rejetée par la recherche. C'est la conclusion que nous partageons de plusieurs organismes internationaux de recherche sur les drogues, dont l'organisme britannique *DrugScope* :

[Traduction] « La théorie de l'escalade s'avère intenable et ne repose sur aucune preuve concrète. La "preuve" que les usagers d'héroïne ont souvent commencé par fumer du cannabis n'est pas surprenante et ne réussit pas à démontrer pourquoi la très grande majorité des usagers de cannabis ne progressent jamais vers des drogues comme le crack ou l'héroïne. La théorie de l'escalade (que le public confond souvent avec la théorie de la porte d'entrée) a été rejetée par la recherche scientifique. La notion que le cannabis "causerait" l'usage de drogues nuisibles a été et devrait être rejetée entièrement. »⁵²

La théorie de la porte d'entrée (*gateway*) suggère que les trajectoires des usagers les amènent à faire face à des choix lorsqu'ils entrent dans une trajectoire de consommation et que l'un de ces choix sera d'utiliser ou non d'autres drogues. Selon cette version, certains facteurs tels une initiation précoce ainsi qu'une consommation

⁵¹ M. J. Boyd, président du Comité sur la toxicomanie et sous-chef du Service de police de Toronto, Association canadienne des chefs de police, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, fascicule 14, page 75.

⁵² DrugScope (2001) *Evidence to Home Affairs Committee Inquiry into Drug Policy*. Disponible en ligne à l'adresse : <http://www.drugscope.org.uk/druginfo/evidence-select/evidence.htm>

plus régulière et plus intensive renforceront cette possibilité. Par ailleurs, ces facteurs eux-mêmes, et notamment une initiation précoce au cannabis, sont reliés à des facteurs antérieurs, tenant du milieu familial et des conditions sociales d'existence, qui prédisposent les jeunes plus vulnérables à cette initiation précoce et à l'installation plus rapide d'une consommation régulière et intensive.

[Traduction] « *Selon cette explication, le lien entre l'usage de cannabis et d'autres drogues reflète le fait qu'un certain nombre de facteurs de risques et de trajectoires de vie prédisposent les jeunes à utiliser du cannabis et que ces mêmes facteurs se superposent avec des trajectoires qui les prédisposent à utiliser d'autres drogues.* »⁵³

En plus de ces facteurs prédisposant certains jeunes à une consommation plus intensive de substances psychoactives – dont l'alcool et le tabac en premier lieu – les conditions sociologiques dans lesquelles les usagers peuvent se procurer du cannabis font en sorte qu'ils sont en contact avec un milieu au moins marginal sinon criminalisé. Les revendeurs sont souvent les mêmes personnes qui vendent aussi héroïne, crack, amphétamines, cocaïne, ou ecstasy de sorte que les probabilités que le jeune usager de cannabis, déjà plus vulnérable par les facteurs de sa trajectoire personnelle, sera plus facilement en contact avec ces autres substances. Ajoutons aussi que grossistes et revendeurs « coupent » ou même mélangent les produits : on nous a dit à certaines occasions que l'ecstasy par exemple pouvait contenir bien autre chose que du MDMA.

De plus, s'il est vrai que la consommation de substances telles l'héroïne ou la cocaïne passe presque obligatoirement par la consommation préalable de marijuana, elle passe aussi par la consommation d'autres substances, notamment la nicotine et l'alcool qui seraient davantage les portes d'entrée d'une trajectoire d'usager que le cannabis.

Si l'on revient aux tendances d'usage des drogues dans la population, alors que plus de 30 % ont une expérience de consommation de cannabis, moins de 4 % ont consommé de la cocaïne et moins de 1 % de l'héroïne.

Par ailleurs, il est vrai que les usagers réguliers et intensifs sont plus susceptibles que les occasionnels de consommer d'autres substances. L'étude de Cohen et Kaal⁵⁴ discutée à la section précédente démontre par exemple que plus de 90 % des usagers de cannabis au long cours ont aussi consommé du tabac et de l'alcool au cours de leur vie, mais surtout que 48 % à Amsterdam et 73 % à San Francisco ont consommé de la cocaïne au moins une fois au cours de leur vie, et 37 % à Amsterdam, 77 % à San Francisco et 47 % à Bremen ont consommé des hallucinogènes au moins une fois. Néanmoins aucun des usagers réguliers de cannabis ne faisait un usage régulier d'autres substances. Les auteurs indiquent aussi que la séquence la plus fréquente est l'alcool (vers 14 ans), le tabac (vers 15 ans), le cannabis (vers 17 ans), suivi des autres drogues au début de la vingtaine.

⁵³ *Ibid.*

⁵⁴ Cohen et Kaal, *op. cit.*, pages 92-93.

Nous sommes d'avis que les données disponibles démontrent que **ce n'est pas le cannabis en soi qui mène vers la consommation d'autres drogues** mais la combinaison des facteurs suivants :

- Des facteurs reliés à l'histoire personnelle et familiale qui prédisposent à une entrée précoce sur une trajectoire de consommation de substances psychoactives commençant avec l'alcool ;
- Une initiation précoce au cannabis, plus précoce que la moyenne des expérimentateurs, et une installation plus rapide dans une trajectoire de consommation régulière ;
- La fréquentation d'un milieu marginal ou déviant ;
- La disponibilité des diverses substances chez les mêmes revendeurs.

CANNABIS, VIOLENCE ET CRIMINALITÉ

Il est évident qu'il existe une certaine association entre les substances psychoactives et la criminalité. Il est tout aussi évident que ce lien est beaucoup plus complexe qu'on ne le dit parfois, comme l'a souligné le professeur Brochu lors de son témoignage devant le Comité.

*« Seulement à mon bureau de l'Université de Montréal, 2 973 études tentent d'établir un lien entre les substances psychoactives et la criminalité. La majorité de ces études viennent des États-Unis ou de pays anglophones, et cela a pour effet de teinter quelque peu la vision des choses parce qu'on sait que nos voisins américains ont opté pour une approche répressive dans le domaine des drogues illicites. Ce qui ressort de l'ensemble de ces études, c'est la complexité du lien entre la drogue et le crime. »*⁵⁵

Depuis son témoignage, le professeur Brochu a rendu publique l'étude dont il a fait mention au Comité.⁵⁶

On peut examiner la relation drogue – criminalité sous au moins trois angles : les effets de la substance elle-même, les effets du coût de la substance, et l'appartenance de la drogue au monde illicite.

Une proportion importante des contrevenants a des problèmes reliés à l'abus de substances psychoactives, l'alcool au premier plan. De fait, l'étude conclut que l'alcool est la substance la plus fréquemment associée aux délits de violence ; dans le cas des délits contre la propriété, ce sont les drogues illicites qui dominent. Le cannabis venait

⁵⁵ Professeur Serge Brochu, Université de Montréal, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 10 décembre 2001, fascicule 12, page 18.

⁵⁶ Pernanen, K. et coll., (2002) *Proportions of crimes associated with alcohol and other drugs in Canada*. Ottawa : Centre canadien de lutte contre l'alcoolisme et les toxicomanies.

au troisième rang (3 à 6 % selon l'étude), loin derrière l'alcool (24 %) et la cocaïne (8 à 11 %).

Sur la seconde approche, les auteurs établissent qu'entre 17 % et 24 % des détenus ont commis une infraction pour se procurer l'argent nécessaire à l'achat de la substance de choix, la plupart du temps de la cocaïne.

Enfin, sur la troisième approche, le fait que les drogues illicites soient marginalisées fait en sorte d'exposer les usagers à un milieu déviant. Nous avons noté à la section précédente que, concernant le cannabis, le fait que les revendeurs puissent offrir de l'héroïne ou du crack en même temps que du cannabis peut favoriser une trajectoire de passerelle vers ces autres drogues. De la même manière, le fait que ces substances soient illégales peut contribuer à amener des personnes vers une trajectoire délinquante. De plus, le milieu du trafic de drogues est un milieu relativement violent où se commettent toute une série d'infractions. Enfin, le seul fait de vendre du cannabis constitue en soi une infraction pénale et l'on sait qu'un certain nombre de personnes sont incarcérées pour cette raison (du moins si la quantité est supérieure à 30 grammes).

Au total, le cannabis en soi ne mène pas à une trajectoire délinquante et c'est plutôt l'inverse qui pourra se produire : une personne s'inscrivant jeune dans une trajectoire de délinquance sera plus rapidement exposée aux drogues illicites et pourra expérimenter plus tôt et s'installer plus tôt dans une carrière de consommateur.

De plus, en raison même de ses effets psychoactifs relaxants et euphorisants et de ses effets moteurs sur le relâchement du tonus musculaire, le cannabis est peu propice à entraîner des actes de violence.

Les données des études sur les consommateurs à long terme confirment ce portrait d'ensemble sur la relation entre cannabis et criminalité. Ainsi, Cohen et Kaal ont observé que moins de 5 % de leurs répondants avaient commis des infractions pour obtenir du cannabis (menus larcins, vol à l'étalage, vols). L'infraction la plus fréquemment commise pour obtenir du cannabis était d'en vendre.

En somme, le Comité retient que le cannabis n'est pas une cause de violence ni de criminalité sauf dans de rares cas et à l'exception bien entendu de la conduite sous l'influence dont il sera question au chapitre 8.

CONCLUSIONS

Nous retenons de l'ensemble des informations sur les tendances, modes, contextes, trajectoires et conséquences sociales de l'usage de cannabis ce qui suit :

Conclusions du chapitre 6

Sur les tendances d'usage

- L'infrastructure de connaissance nationale sur les tendances et contextes d'usage est fondamentalement faible et doit être renforcée d'urgence.
- Les données épidémiologiques disponibles indiquent que près de 30 % de la population (12 à 64 ans) a une expérience vie du cannabis.
- Environ 10 % ont une prévalence au cours de l'année précédente.
- Jusqu'à 30 % des usagers de l'année dernière sont des usagers courants (au cours du mois).
- Environ 15 % des usages du dernier mois sont des usagers quotidiens.
- La consommation est la plus importante entre 16 et 24 ans.
- Chez les jeunes de niveau secondaire, la prévalence au cours de l'année est plus élevée, à environ 40 %.

Sur les trajectoires

- La prévalence de l'usage mensuel chez les jeunes est d'environ 30 %.
- La prévalence de l'usage quotidien chez les jeunes est d'environ 9 %.
- L'âge d'initiation est en moyenne à 15 ans.
- La plupart des expérimentateurs discontinuent l'usage.
- Les usagers réguliers ont généralement une initiation plus précoce.
- Les usagers à long terme ont le plus souvent une trajectoire de consommation en dents de scie.
- Les consommateurs réguliers à long terme connaissent leur période de consommation intense au début de la vingtaine.
- La plupart des usagers à long terme intègrent leur consommation à leurs activités familiales, sociales et professionnelles.

Sur la passerelle

- Le cannabis n'est pas, en soi, une cause de consommation d'autres drogues.
- La consommation de cannabis peut être une porte d'entrée en raison de l'illégalité qui met en contact avec d'autres substances.

Sur la violence et la
criminalité

- Le cannabis n'est pas en soi une cause de délinquance et de criminalité.
 - Les jeunes qui ont une trajectoire de consommation régulière et intensive ont souvent déjà une inscription dans une trajectoire déviante sinon délinquante
 - Le cannabis n'est pas une cause de violence.
-

CHAPITRE 7

LE CANNABIS : EFFETS ET CONSÉQUENCES

Le cannabis, nous l'avons vu au chapitre 5, agit sur le système nerveux central et sur des systèmes périphériques de diverses manières. Si la recherche a permis d'établir assez clairement le rôle de certaines des composantes du cannabis, et notamment du Δ^9 THC qui en est le principal élément actif, l'on connaît moins le rôle des autres composants du cannabis. De même, la recherche, souvent menée sur des animaux en laboratoire ou de manière encore plus pointue sur des molécules extraites aux fins d'expérimentation, ne tient pas compte des conditions dans lesquelles la marijuana sera consommée par l'utilisateur moyen. On a vu que, dans certains cas, les dosages utilisés aux fins d'expérimentation sur des animaux en laboratoire, notamment pour déterminer les effets chroniques de l'usage régulier, portent sur des doses inimaginables pour des humains, équivalant à 570 cigarettes de marijuana par jour. Puisque le contenu en THC est très variable selon les arrivages de cannabis sur le marché, puisque les consommateurs en font des usages diversifiés selon les lieux et les circonstances, et sachant aussi que des caractéristiques individuelles sont en interaction avec les effets réels du cannabis, la connaissance des effets en sera nécessairement affectée.

De manière encore plus technique, il convient de souligner qu'une association statistique – c'est-à-dire le fait que deux faits soient concomitants – ne signifie nullement relation de causalité. Pour que l'on puisse faire une inférence de causalité, il faut satisfaire à un certain nombre de prérequis méthodologiques : en plus de l'association statistique, l'on doit pouvoir écarter le hasard, repousser des hypothèses alternatives, et démontrer que le facteur causal précède bel et bien la conséquence imputée. Selon l'OMS :

[Traduction] « Des inférences causales peuvent être faites à partir de données de recherche en évaluant dans quelle mesure la « preuve » satisfait aux critères largement reconnus. Ceux-ci incluent la force de l'association, sa consistance, sa spécificité, la relation dose-réponse, la plausibilité biologique et la cohérence avec d'autres connaissances. Ces critères ne sont pas suffisants pour établir qu'une association est causale, mais plus on satisfait de critères, plus il est vraisemblable qu'il s'agit d'une association qui est causale.»¹

¹ World Health Organization (1997), *op. cit.*, page 3 ; voir aussi sur cette question : Hall, W. (1987) « A simplified logic of causal inference » *Australian and New Zealand Journal of Psychiatry*, 21, pages 507-513.

Par ailleurs, une tradition forte de philosophie de la connaissance scientifique soutient qu'on ne peut jamais prouver une hypothèse, tout au mieux peut-on la falsifier – c'est-à-dire rejeter – des hypothèses alternatives.²

Pour tenter de répondre à ces exigences de la causalité, les chercheurs ont élaboré des méthodes de recherche sophistiquées, prévoyant notamment la sélection aléatoire des sujets à l'étude, l'assignation aléatoire aux conditions expérimentales et aux conditions sans traitement expérimental (groupe de contrôle), l'utilisation de techniques du double aveugle et du placebo, et le contrôle fin de variables intervenantes qui peuvent représenter autant d'hypothèses alternatives que l'on essaie ainsi d'éliminer. C'est ainsi par exemple que l'on tente, la plupart du temps, de tester les médicaments qui sont mis sur le marché.

Pour la plupart des questions impliquant le comportement humain, a fortiori en société, l'on peut difficilement et rarement établir une telle relation de causalité pour la simple raison que l'on peut rarement satisfaire à chacune de ces exigences méthodologiques. Dans le cas qui nous occupe sur les effets de l'usage du cannabis, les contraintes méthodologiques sont particulièrement évidentes. On ne peut tirer un échantillon aléatoire des usagers de cannabis puisqu'on n'en connaît pas la population. Il faut donc recourir à des méthodes alternatives de sélection des sujets (volontaires par exemple). On peut difficilement faire fumer du cannabis à des personnes qui n'en auraient jamais consommé³ sans risquer de contrevenir à certaines règles d'éthique voire aux dispositions légales. Et si l'on a recours à des fumeurs déjà expérimentés, il se produit nécessairement une contamination du groupe de contrôle. Le cannabis que l'on utilise en laboratoire peut être totalement différent de celui que consomment les usagers qui se le procurent sur la rue. Et les conditions de laboratoire contrôlé ne reproduisent certainement pas les modes d'usage du cannabis dont on sait qu'il est la plupart du temps une forme de rituel social. Quant aux études – et elles sont nombreuses – menées sur des échantillons d'animaux (singes, souris, rats...) – elles peuvent être intéressantes mais les possibilités de transposer leurs résultats aux humains sont limitées. Notons enfin que, la plupart des fumeurs de cannabis étant aussi des fumeurs de tabac et des consommateurs d'alcool, il est difficile de dissocier les effets des uns et des autres.

Cela n'empêche pas évidemment les chercheurs de mener des études, et c'est d'ailleurs nécessaire. Par contre, cela oblige les chercheurs à la plus grande prudence dans l'interprétation de leurs résultats, notamment quant à la capacité de généraliser à l'ensemble des usagers de marijuana et de tirer des inférences causales. Prudence que l'on ne retrouve pas toujours, tant s'en faut, comme ce chapitre le montrera à l'envi.

² Là dessus, les travaux de Karl Popper, notamment : (1978) *Logique de la découverte scientifique* Paris : Payot et (1985) *La connaissance objective*. Bruxelles : Complexe.

³ Il est même un peu ironique que le National Institute on Drug Abuse (NIDA) aux USA finance des études qui comportent le fait de faire fumer des gens alors que l'Institut croit que le cannabis est une drogue d'entrée : voir par exemple l'étude de Haney, M. et coll. (1999) « Abstinence symptoms following smoked marijuana in humans » *Psychopharmacology*. 141, pages 395-404.

Notons enfin la distinction entre effets et conséquences. Fumer du cannabis a des effets immédiats, certains physiologiques d'autres psychosociaux, que nous devons décrire. Mais fumer du cannabis, surtout de manière répétée, peut aussi avoir des conséquences, certaines proximales – par exemple la capacité à mener certaines tâches ou la capacité à conduire un véhicule – et d'autres plus distales – par exemple si le fait de fumer du cannabis entraîne des risques plus élevés de cancer du poumon ou s'il affecte la mémoire de manière durable.

Nous sommes conscients de ce que ces distinctions peuvent avoir d'arbitraire dans la mesure où l'humain est un tout, un organisme intégré dans son environnement affectif et social et dans son écosystème. Les effets physiologiques, psychologiques et sociaux sont en interaction les uns avec les autres, ils s'interpénètrent, s'influencent, et agissent ensemble plutôt que séparément. D'une certaine manière, ces distinctions demeurent le reflet de notre incompetence, du moins de notre incapacité, à penser les divers systèmes de l'humain ensemble, dans leur globalité. Cette même incompetence peut, pour partie aussi, expliquer les difficultés que nous avons à concevoir une politique sur les drogues. D'autres après nous arriveront, souhaitons-le, à produire une approche intégrée, holistique. Pour l'heure, nous en sommes réduits à utiliser les moyens à notre disposition, ceux de la connaissance fragmentée.

Une dernière note préliminaire. Nous avons eu la préoccupation constante de rester rigoureux. Pour autant, nos ressources ne nous permettaient pas d'être exhaustifs et d'examiner une à une les études sur l'ensemble de ces questions. Au total, on sait qu'environ dix mille études ont été publiées au cours des quarante dernières années sur le cannabis ! Certes, comme le souligne Nelson, « (Traduction) *Bien que le volume total de littérature sur ce sujet soit tout simplement immense au premier abord, l'examen révèle rapidement que beaucoup d'études sont répétitives et que les auteurs renvoient constamment à un petit nombre de textes.* »⁴ Ceci étant, nous ne pouvions faire l'économie de l'examen d'un certain nombre de ces études. C'est pourquoi nous avons commandé la préparation d'un rapport de synthèse⁵ et avons aussi examiné des synthèses de la littérature scientifique qui ont été préparées ces dernières années.⁶

Ce chapitre se divise en cinq sections. La première rassemble un ensemble d'affirmations sur les effets présumés de la marijuana que le Comité a entendues ou qui ont été portées à sa connaissance par ses recherches. Les trois sections suivantes examinent d'abord les effets aigus du cannabis, puis tour à tour ses conséquences physiologiques et neurologiques, psychologiques, et sociales. En raison de son importance et de la place centrale qu'elle occupe dans les préoccupations sociales et

⁴ Nelson, P.L. (1993) « A critical review of the research literature concerning some biological and psychological effects of cannabis » in Advisory Committee on Illicit Drugs (eds.) *Cannabis and the law in Queensland : A discussion paper*. Brisbane : Criminal Justice Commission of Queensland.

⁵ Wheelock, B. (2002) *op. cit.*

⁶ Notamment les rapports déjà mentionnés de l'INSERM (2001), *op. cit.* et de la Conférence scientifique internationale sur le cannabis (2002) ; ainsi que le rapport du National Institute of Medicine aux USA et le livre édité par le professeur Kalant, l'un de nos témoins.

politiques, nous examinons ensuite spécifiquement la question de la dépendance qui peut découler d'une consommation prolongée de cannabis.

EFFETS ET CONSÉQUENCES DU CANNABIS : CE QU'ON NOUS A DIT

Au cours de nos audiences, de nombreux témoins nous ont fait part de leurs connaissances sur les effets du cannabis. Certaines de ces connaissances provenaient de leurs propres travaux de recherche. D'autres provenaient de leurs expériences professionnelles. D'autres enfin étaient soit des interprétations de la littérature scientifique, soit des anecdotes. Dans cette section, nous ne faisons pas de distinction entre les témoignages, nous n'en évaluons pas la validité. Nous voulons uniquement faire ressortir la richesse en même temps que la complexité de ce qui nous a été dit.

« Le premier message est que les drogues, y compris le cannabis, sont nocives. (...) De nombreuses conceptions erronées circulent au sujet de la consommation de cannabis. Une forte consommation a incontestablement des conséquences néfastes sur la santé. Ces conséquences se traduisent la plupart du temps par des troubles respiratoires, un manque de coordination physique, des problèmes de développement pendant la grossesse et après la naissance, des troubles de mémoire et des troubles cognitifs, sans compter les effets psychiques. (...) »⁷

« D'une façon générale, la marijuana (cannabis) et ses dérivés sont décrits comme des drogues douces pour les différencier des préjudices connus associés aux autres drogues illicites. Cette approche, en dépit de ses dangers, fonctionne et contribue à l'incompréhension, à la désinformation et à l'accroissement de la tolérance à l'égard de sa consommation. La marijuana est une drogue puissante aux effets variés. Ses consommateurs sont sujets à divers problèmes de santé comme les lésions respiratoires, la réduction de la coordination physique, les préjudices à la grossesse et au développement postnatal, la réduction de la mémoire et des fonctions cognitives et divers effets psychiatriques. La consommation de marijuana est associée à la médiocrité au travail et en classe de même qu'aux problèmes d'apprentissage chez les jeunes. Elle est internationalement connue comme drogue d'introduction. Ses facteurs de risque d'assuétude sont comparables à ceux des autres formes de toxicomanie. (...) La communauté internationale en est venue à un consensus visant à placer la marijuana, tout comme les autres intoxicants, sous contrôle. Cette décision repose sur des preuves de sa nocivité pour la santé humaine et de son potentiel de création de dépendance. »⁸

⁷ Témoignage de Michael J. Boyd, président du Comité sur la toxicomanie et Directeur adjoint du Service de police de Toronto, pour l'Association canadienne des Chefs de police, Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, fascicule no 14, page 74.

⁸ M. Dale Orban, sergent-détective, Service de police de Regina, pour l'Association canadienne des policiers et policières, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, lundi 28 mai 2001, fascicule 3, page 47. Notons immédiatement que la dernière affirmation est totalement fausse comme nous le verrons aux chapitres 19 et 12 sur les conventions internationales et la législation canadienne qui ont placé le

« J'aimerais brièvement passer en revue deux des effets dont la nocivité, je crois, a été relativement bien établie, et quelques autres effets qui font l'objet d'importantes théories. (...) L'effet de la marijuana qui est, de loin, le plus constant et le plus net est la perturbation de la mémoire à court terme. C'est la mémoire que l'on qualifie généralement de « mémoire de travail ». Elle touche le mécanisme du cerveau qui est responsable de la préservation, à court terme, de l'information nécessaire à l'exécution de tâches complexes qui exigent planification, compréhension et raisonnement. La perturbation relativement grave de la mémoire de travail peut contribuer à expliquer pourquoi les sujets intoxiqués à la marijuana éprouvent de la difficulté à maintenir une chaîne d'idées ou à suivre une conversation. (...) Manifestement c'est un problème pour quelqu'un qui va à l'école drogué. (...) Il est de plus en plus clair que le cannabis est une drogue dont les consommateurs réguliers deviennent dépendants, et que cela a des effets nocifs sur un nombre de gens. »⁹

« Il a été démontré que la marijuana est associée à la conduite dangereuse et aux accidents. Les preuves suggèrent que la marijuana contribuerait à un nombre significatif de blessures et de mortalité routière au Canada. Il a été démontré qu'elle a des effets négatifs sur le développement académique et social de certains adolescents. L'usage chronique peut être associé aux maladies pulmonaires telles la bronchite, l'emphysème et le cancer. Certaines personnes peuvent développer une psychose, et d'autres symptômes tels l'anxiété, la dépression et la panique se produisent. On sait que la marijuana est addictive. Bien que variable, le taux d'addiction varie entre 5 et 10 %. J'aimerais souligner que la toxicomanie est une maladie et que la marijuana peut mener à la toxicomanie chez certaines personnes génétiquement prédisposées. »¹⁰

« D'après les témoignages, 95 % des personnes qui fument de la marijuana au Canada en font un usage faible, occasionnel et modéré. Leur consommation n'a pas d'incidence d'ordre sanitaire pour autant qu'il s'agisse d'adultes en santé. Les 5 % qui restent sont des usagers chroniques, des personnes qui fument une cigarette de marijuana ou plus par jour. S'ils persistent, ils finiront par contracter une bronchite chronique attribuable au simple fait de fumer. La même chose leur arriverait s'ils fumaient l'herbe de leur pelouse. Du simple fait qu'ils inhalent la fumée résultant de la combustion d'un matériau, ils causent des dommages à leurs voies respiratoires. Il y a trois grands groupes de personnes vulnérables : les femmes enceintes, et à ce moment-là, c'est à notre avis une question qui doit se régler entre la femme et son médecin ; les handicapés mentaux, particulièrement les schizophrènes paranoïaques (...) et, chose plus importante, les jeunes n'ayant pas atteint la maturité. La consommation de marijuana chez les jeunes — particulièrement sur une base régulière — semble nuire à leurs études et au processus de

cannabis sur les listes de drogues contrôlées dès 1923, sans savoir à cette époque aucune connaissance de ses effets physiques ou psychologiques, et pour de tout autres raisons, lorsque raisons il y avait.

⁹ Dr Mark Zoccolillo, professeur de psychiatrie et professeur adjoint de pédiatrie, Université McGill et Hôpital pour enfants de Montréal, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, deuxième session de la trente-sixième législature, 16 octobre 2000, fascicule no 1, page 77.

¹⁰ Dr Bill Campbell, président, Société médicale canadienne sur l'addiction, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 mars 2002, fascicule no 14, page 56.

*maturation. Comme c'est le cas de toutes les substances intoxicantes, il est recommandé de ne pas en consommer avant d'avoir atteint la maturité. »*¹¹

*« Des études récentes menées par le Center for Substance Abuse Prevention des États-Unis font ressortir certains des risques liés à la consommation du cannabis. Nous savons déjà que la consommation du cannabis a des effets nocifs sur de nombreux systèmes dont le système respiratoire, le système moteur, la mémoire et le système immunitaire, et qu'elle crée la dépendance ainsi que la tension. De nombreuses études démontrent maintenant l'existence d'un syndrome de sevrage chez les consommateurs chroniques de cannabis qui cessent de consommer cette drogue. (...) Des recherches indiquent que la consommation de cannabis nuit au développement du fœtus. (...) Permettez-moi maintenant de vous parler d'un trouble de l'attention qui prend la forme d'une déficience du balayage visuel et des fonctions connexes. Le balayage visuel se développe en particulier au début de l'adolescence et l'on craint que la consommation de cannabis puisse déclencher une déficience à cet égard. »*¹²

*« Un certain nombre d'effets négatifs ont été suscités en laboratoire ou observés auprès des consommateurs à long terme (...). La consommation de cannabis présente évidemment des risques et des conséquences négatives pour la santé, mais la majorité de ces risques n'apparaissent que dans des circonstances bien particulières. Ils sont associés à une consommation constante et fréquente et doivent donc être compris dans ce contexte. On s'accorde pour dire que le symptôme dit de dépendance ou de sevrage peut apparaître chez les grands consommateurs chroniques, mais il est tout à fait limité à ce petit groupe. (...) Le rapport précurseur de Hall et de ses collègues australiens (...) ont conclu que l'on peut atténuer sensiblement les principaux risques de la consommation du cannabis en évitant de conduire sous l'effet de cette substance, en évitant une utilisation chronique et quotidienne et en évitant d'inhaler profondément la fumée. Voilà les principaux facteurs qui permettent d'éviter la plupart des dangers et des risques liés à la consommation. »*¹³

« Quoi qu'il en soit, nous parlons de dérivés de plantes qui contiennent un certain nombre d'alcaloïdes psychoactifs. Les effets psychoactifs comprennent principalement une euphorie légère et une altération de la notion du temps. Une désorientation et des crises de panique peuvent aussi se produire. On dit aussi que l'appréciation de la musique et de l'art est meilleure à l'instar de l'appétit. Ce dernier élément semble important pour l'un des prétendus bienfaits, à savoir l'atténuation des effets de la cachexie liée au sida et de la nausée qui accompagne les traitements de chimiothérapie. (...) Parce que le cannabis est habituellement fumé, il comporte les mêmes effets aigus et chroniques que le tabac, dont l'irritation des voies respiratoires, la toux, et, probablement en raison d'une utilisation à long terme, la bronchite, la bronchopneumonie chronique obstructive et le cancer du poumon et du pharynx. La consommation de cannabis affaiblit le système immunitaire, mais son incidence sur la santé est probablement mineure. (...) Par ailleurs des études menées chez les animaux ont révélé des répercussions sur le système de

¹¹ M. John Conroy, avocat, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 mars 2002, fascicule no 14, page 11.

¹² Dr Colin Mangham, Directeur, Prevention Source BC., témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 17 septembre 2001, fascicule no 6, page 71.

¹³ Dr Benedikt Fischer, professeur, département des sciences de la santé publique, Université de Toronto, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 17 septembre 2001, fascicule no 6, page 9.

reproduction. (...) Ces résultats sont bien sûr pertinents pour l'humain, mais des études menées chez ces derniers n'ont pas encore démontré une incidence négative mesurable, à part des répercussions sur le comportement et le développement des enfants nés de mères qui ont fumé du cannabis durant la grossesse. (...) Beaucoup de documents existent au sujet de l'incidence du cannabis sur la cognition. La mémoire à court terme est touchée et l'utilisation à long terme peut mener à un mauvais fonctionnement chronique et mesurable de la fonction cognitive, bien que cela puisse résulter d'une intoxication chronique persistante plutôt que d'une détérioration de la substance du cerveau. Le cannabis a aussi une incidence négative sur les habiletés psychomotrices. Il est d'ailleurs contre-indiqué de conduire ou de faire fonctionner de l'équipement lourd sous l'effet du cannabis. Encore une fois, contrairement à l'alcool, le cannabis a tendance à ralentir les conducteurs au lieu de les faire accélérer. De même, il est rare que les fumeurs de cannabis soient impliqués dans des cas d'agression et de violence physique. Le cannabis peut déclencher des symptômes de la schizophrénie chez les personnes atteintes de cette maladie ou du trouble schizophréniforme. La documentation fait aussi état de crises de panique et dysphorie. On avait prétendu que le cannabis provoquait l'apparition du syndrome amotivationnel, mais les chercheurs ont rejeté cette idée au cours des dernières années. (...) Des préoccupations ont été soulevées avec raison à propos de la consommation de cannabis sur le développement des adolescents. Il s'agit d'une question importante, d'autant plus que l'utilisation est la plus élevée à la fin de l'adolescence. Le risque de décrochage scolaire, l'instabilité sur le plan de l'emploi et le passage à des drogues plus dures sont toutes des conséquences négatives qui ont été associées à la prise de cannabis. On ne s'entend pas encore toutefois sur la mesure dans laquelle ces liens constituent des causes. D'autres hypothèses ont été posées, à savoir que la consommation de cannabis chez les adolescents, comme la consommation d'alcool, le début précoce des relations sexuelles ou le tabagisme, est en fait un repère pour d'autres risques ou conditions sociales défavorables. (...) Tous les chercheurs s'entendent toutefois pour affirmer que l'effet ressenti en consommant du cannabis diminue les habiletés scolaires. Des études récentes semblent démontrer une baisse mesurable, quoique réversible, du quotient intellectuel liée à la consommation assidue de grandes quantités de cannabis, et que la participation à des activités illégales comporte des risques considérables, surtout peut-être pour les jeunes dont le lien avec l'école est faible. »¹⁴

« Je m'attarderai d'abord sur les effets aigus puis sur les effets chroniques. Les effets aigus sont ceux consécutifs à l'action d'une dose unique. Dans le système nerveux central, cela inclut une période de plusieurs heures pendant laquelle le sujet est atteint de stupeur chimique. On compte, parmi les effets secondaires, une baisse du niveau d'éveil et la somnolence, qui se conjugue à la somnolence provoquée par l'alcool et autres déprimeurs du système nerveux. Parmi les autres effets secondaires, on note une altération de la mémoire à court terme, un ralentissement des réactions, une baisse de l'exactitude lors des tests et une attention moins sélective. (...) Une faible dose produit généralement les effets qui font que les gens prennent plaisir à fumer de la marijuana. Il s'agit d'une euphorie douce, de détente, de sociabilité accrue et d'une baisse non spécifique de l'anxiété. Toutefois, une dose élevée entraîne la mauvaise humeur, l'anxiété et la dépression. L'anxiété accrue peut aboutir à la panique ou même à une psychose toxique aiguë qui, heureusement, est de très courte durée et disparaît lorsque l'effet de la drogue se dissipe. Une dose élevée cause une altération de la coordination motrice, des mouvements mal assurés et une baisse du tonus musculaire, ce qui peut être utile du point de vue thérapeutique. (...) À petites doses, la perception est améliorée. Cela fait partie du plaisir. À fortes doses, la même action produit une

¹⁴ Dr Perry Kendall, agent de santé de la province de la Colombie-Britannique, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 17 septembre 2001, fascicule no 6, pages 33-33.

distorsion sensorielle, des hallucinations et la psychose toxique aiguë dont j'ai parlé. (...) Elle n'a pas d'effets graves sur le système cardio-vasculaire. (...) Pour ce qui est des effets chroniques, dans le système nerveux central, on constate des troubles de la mémoire, une pensée floue, la facilité verbale atténuée ainsi que des déficits d'apprentissage chez les grands consommateurs, les consommateurs chroniques. J'insiste sur le mot « grand » parce que le consommateur convivial ne présente pas, dans l'ensemble, de troubles importants, pas plus que le buveur convivial. (...) Heureusement, les effets sur les facultés cognitives ont tendance à disparaître si le grand consommateur arrête, pour quelque raison que ce soit. Tant que la consommation dure, on observe une intoxication chronique, de l'apathie, de la confusion, de l'hébétéude, de la dépression et parfois de la paranoïa. (...) La dépendance au cannabis, telle que définie selon les critères diagnostics conventionnels de dépendance que l'on retrouve dans la dernière édition de la publication de l'American Psychiatric Association ou son équivalent à l'Organisation mondiale de la santé, est largement attestée chez les grands consommateurs, les consommateurs réguliers. De nombreuses études démontrent à présent qu'un pourcentage important de consommateurs réguliers sont dépendants. Dans certaines études australiennes de grands consommateurs de longue durée, principalement des consommateurs quotidiens pendant des périodes de 15, 17 et 20 ans, 60 % d'entre eux répondent aux critères diagnostiques de dépendance. (...) On a constaté une tolérance. Pour l'essentiel, ce n'est pas un effet très grave et le syndrome de sevrage physique n'est pas sévère. Néanmoins, il existe, ce qui indique une dépendance physique outre la dépendance psychologique. »¹⁵

« À long terme, les effets chroniques du cannabis vont entraîner essentiellement les symptômes suivants : des déficits de la mémoire, de l'attention et de la concentration, un syndrome d'amotivation qui va se caractériser par une passivité et une diminution de l'initiative, des risques accrus de maladies respiratoires, en particulier l'asthme, la bronchite et l'emphysème, et des risques accrus de cancer. (...) On peut ajouter des troubles hormonaux qui peuvent entraîner une diminution de la fertilité chez l'homme et chez la femme. Également chez l'homme, cela peut entraîner le développement des seins qui peut être très désagréable sur le plan esthétique. (...) Finalement, cela peut aussi entraîner, à la longue, une diminution de la résistance aux infections. »¹⁶

Comme on le voit, les avis se recoupent parfois, et divergent souvent. Ils se recoupent au moins sur la nature des conséquences qui peuvent préoccuper. On a vu tour à tour des effets d'ordre physiologique (risques de cancer, impacts sur la reproduction ou sur le système immunitaire, détérioration des cellules du cerveau), des effets d'ordre psychologique (syndrome amotivationnel, risques de psychose, altération des fonctions cognitives et spécifiquement de la mémoire), et des impacts d'ordre social (sur la famille et le travail, ainsi que sur la conduite de véhicules ou l'opération de machinerie). Ils se contredisent surtout sur la portée des conclusions que l'on peut tirer de la connaissance. Dans quelle mesure, en effet, peut-on généraliser les effets que l'on observe à partir d'échantillons souvent petits, rarement aléatoires de sujets ? Dans

¹⁵ Dr Harold Kalant, professeur émérite à l'Université de Toronto, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule no 4, pages 74-76.

¹⁶ Dr Mohamed ben Amar, professeur de pharmacologie et de toxicologie, Université de Montréal, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule no 4, pages 9-10.

quelle mesure encore généraliser les données sur des consommateurs chroniques qui ne représentent – comme l’a montré le chapitre précédent – qu’une faible proportion des usagers du cannabis ? Dans quelle mesure surtout ces données permettent-elles d’établir des relations causales ?

Le Comité constate aussi que la plupart des témoins ont mis l’accent sur les dimensions négatives, rarement sur les aspects positifs. Pourtant, si des personnes consomment des drogues généralement, du cannabis en particulier, ce n’est sûrement pas uniquement pour s’autodétruire ni parce que ces drogues n’auraient que des effets négatifs. Admettant les limites de toute comparaison entre substance, on peut néanmoins faire le parallèle avec l’alcool : la plupart d’entre nous connaissons le plaisir d’un verre de vin partagé avec des amis lors d’un bon repas, tout comme nous connaissons aussi les dangers de l’abus et de l’alcoolisme. Nous constatons aussi qu’il est difficile, même pour les chercheurs les plus chevronnés, de faire le tri des connaissances sans leur accorder une valence relativement aux orientations que devraient avoir les politiques publiques. Une même connaissance sera interprétée ici de manière négative, là de manière plus modérée, selon les préconceptions de l’interprète quant au « meilleur » choix d’une politique publique. Nous ne sommes pas à l’abri de ces biais. D’ailleurs, nous ne nions pas que nous avons des préconceptions, héritées de nos histoires personnelles, de nos lectures, des audiences aussi que nous avons menées en 1996 autour de l’étude de la législation canadienne sur les drogues. Parmi ces préconceptions qui ont, du moins au départ, orienté notre lecture des témoignages, nous pouvons noter :

- La conviction que le système actuel n’atteint pas ses objectifs, ne serait-ce qu’en raison de l’augmentation connue de la consommation de cannabis, notamment chez les jeunes ;
- Une préférence pour une approche plus consensuelle et plus en phase avec les attitudes des Canadiens ;
- Une préférence pour une approche de réduction des méfaits comme en témoignait le libellé de notre premier mandat ;
- Une tendance à distinguer entre drogues douces – dont le cannabis – et drogues dures (héroïne, cocaïne) ;
- Une certaine méconnaissance des effets spécifiques du cannabis, au regard des études toxicologiques et pharmacologiques menées au cours des dernières années.

Ceci étant, nous n’avons pas travaillé en vase clos. Non seulement avons-nous été accompagnés de notre équipe de recherche – sociologues, juristes, criminologues – tout au long de nos travaux, non seulement avons-nous aussi été sous la surveillance étroite en quelque sorte des témoins et plus largement du public ; mais surtout, d’autres que nous, dans d’autres pays, ont mené des études similaires au cours des dernières années dont nous nous sommes inspirés et auxquelles nous avons comparé nos propres conclusions.

EFFETS AIGUS DU CANNABIS

En toxicologie, on entend par effets aigus ceux qui se produisent immédiatement suite à la consommation et pendant que les effets psychoactifs se font sentir. Ces effets correspondent aussi à ce qu'on a appelé depuis déjà Moreau de Tours en 1845, l'ivresse cannabique.¹⁷ Les effets « réels » – sur les systèmes biologiques – et les effets ressentis par les usagers peuvent varier selon un ensemble de facteurs tels l'expérience de l'utilisateur avec le cannabis ou avec d'autres drogues (incluant le tabac), ses attentes, ou le contexte d'usage. De fait, « *les effets psychoactifs du cannabis, plus que toute autre substance, varient d'un sujet à l'autre et, pour un même sujet, d'une expérience à l'autre.* »¹⁸ De plus, en l'absence d'une mesure fiable du contenu de THC dans le plasma sanguin, il est difficile de relier la durée et la force des effets à diverses préparations de cannabis, notamment en raison de variations dans la composition de la substance et la biodisponibilité du THC. Il est encore plus difficile d'attribuer des effets relativement rares (par exemple l'apparition de symptômes psychotiques) dans la mesure où l'on peut difficilement décider si la co-occurrence est coïncidentielle, si ces effets relèvent d'autres substances souvent associées à la prise de cannabis ou de doses très élevées de cannabis, ou d'interactions entre ces divers facteurs.¹⁹

Les effets aigus du cannabis sont relativement bien documentés. La recherche distingue parfois entre effets centraux et périphériques²⁰, parfois entre effets somatiques et effets psychologiques et psychomoteurs²¹, ou tout simplement se contente d'une liste d'effets de l'un ou l'autre type.²²

Règle générale, on distingue deux phases principales à l'intoxication au cannabis :

❖ *La première phase, celle dite du « high » (effet planant), inclut les effets suivants :*

- Une modification de l'humeur générale accompagnée de gaieté allant jusqu'à l'hilarité, de loquacité, d'un sentiment d'insouciance ;
- Une modification du vécu corporel, incluant une sensation de bien-être et de satisfaction, une impression de calme et de relaxation, sociabilité ;
- Des perturbations de la sphère intellectuelle incluant augmentation de la confiance en soi, pensées magiques (impression de pouvoir s'acquitter plus facilement de tâches), distorsion de la perception du temps, de l'espace et de l'image de soi ;

¹⁷ Moreau de Tours, J., *Du haschich ou de l'aliénation mentale, étude psychologique*. Paris : Masson.

¹⁸ INSERM, *op. cit.*, page 118.

¹⁹ Voir WHO, 1997, *op. cit.*, page 3.

²⁰ C'est le cas par exemple de la catégorisation proposée par Ben Amar (sous presse).

²¹ C'est le cas de l'expertise collective de l'INSERM (2001) *op. cit.*

²² C'est le cas de la plupart des travaux : WHO, (1997) *op. cit.* ; Commission fédérale pour les questions liées aux drogues (1999) *Rapport sur le cannabis*. Berne : Office fédéral de la santé publique ; et du rapport de Wheelock (2002) *op. cit.*

- Des modifications sensorielles, marquées par une accentuation des perceptions sensorielles (couleurs, sons, semblent parfois plus intenses), des impressions tactiles plus fortes.
- ❖ *La deuxième phase, dite du « coming down », se caractérise par un effet de torpeur ou de somnolence apparaissant graduellement quelque temps après la prise.*

De manière plus spécifique selon leur type d'action, on distinguera entre les effets plus proprement somatiques et les effets d'ordre plutôt psychologique.

❖ *Effets somatiques :*

- Des effets cardiovasculaires : environ 10 minutes après la prise, la fréquence et le débit cardiaque et cérébral augmentent. La tachycardie (accélération du cœur) peut atteindre des hausses de 20 % à 50 % par rapport au rythme normal et pourrait contribuer à précipiter des crises d'anxiété et de panique chez certains sujets. Elle peut être responsable de palpitations, de réduction de la tolérance à l'effort chez les sujets ayant des troubles coronariens, voire faciliter le développement de troubles cardiaques chez les sujets vulnérables ou prédisposés. Une étude récente suggère que le risque d'infarctus du myocarde croît de 4,8 fois dans la première heure suivant la consommation de marijuana et se situe à 1,7 fois dans la deuxième heure, suggérant ainsi que le cannabis peut représenter un risque dans les 60 minutes suivant sa consommation. On note aussi une hypotension en position couché. Ces effets varient en fonction de la dose et de la concentration en THC ;
- Des effets bronchopulmonaires : les effets sont proches de ceux du tabac. On note une activité bronchodilatatoire dans les 60 minutes suivant la consommation. Celle-ci n'évite cependant pas les conséquences inflammatoires du cannabis fumé ni l'hyperréactivité bronchique secondaire qui se traduisent notamment par la toux résultant de l'action du THC et du potentiel irritant des produits de combustion ;
- Des effets oculaires : on note une rougeur des yeux par vasodilatation et irritation conjonctivale ;
- Autres effets somatiques : sécheresse buccale par diminution de la sécrétion salivaire, augmentation de l'appétit par hypoglycémie (baisse du taux de sucre sanguin), et plus rarement des nausées et vomissements, de la diarrhée, ou la rétention d'urine.

❖ *Effets psychologiques et psychomoteurs :*

- Diminution de la mémoire à court terme (mémoire dite de travail) : se rappeler des mots, images, des histoires ou des sons ;

- Perturbation des performances psychomotrices incluant : diminution de l'attention et de la concentration, diminution des réflexes, ralentissement du temps de réaction, troubles de la coordination des mouvements et altérations et réduction de l'habileté à accomplir des tâches complexes. Ainsi, une étude de Fant et coll., décrit une diminution de la poursuite visuelle dans le champ central et périphérique après 15 minutes et pouvant se maintenir pendant plus de 5 heures.²³ Par ailleurs, notons que selon le professeur Roques, les études sur les effets du cannabis sur les facultés d'apprentissage, notamment la mémoire à court terme et la mémoire de travail sont critiquables sur le plan méthodologique et leurs résultats contradictoires, « les plus forts consommateurs étant les moins affectés ».²⁴

Les effets somatiques, cognitifs et psychomoteurs sont reliés à la quantité de cannabis inhalée et à la concentration en THC. Ainsi, selon l'INSERM :

*« Une quantité correspondant à 25 bouffées altère les compétences psychomotrices et les performances cognitives, cela de façon plus nette que la consommation de 10 bouffées ou de 4 bouffées. Les taux plasmatiques maximaux passent alors de 57 ng/ml (pour 4 bouffées d'une cigarette contenant 1,75 % de Δ^9 THC) à 268 ng/ml (pour 25 bouffées d'une cigarette contenant 3,55 % de Δ^9 THC). Heishman et coll. (1997) établissent une équivalence approximative entre 16 bouffées à 3,55 % de Δ^9 THC et environ 70g d'alcool. À ces doses, l'altération porte sur la mémoire, les performances cognitives et psychomotrices et sur l'humeur. »*²⁵

Les effets cognitifs et psychomoteurs peuvent se maintenir durant plus de cinq heures, et la durée de certaines altérations cognitives peut se prolonger pendant 24 heures.

À forte dose, ou pour les usagers inexpérimentés, le cannabis peut entraîner un certain nombre de réactions négatives, pouvant aller jusqu'à une authentique expérience psychotique délirante, hallucinatoire, maniaque ou hypomaniaque. Ces expériences sont cependant transitoires. Certains des troubles documentés lors de l'absorption de fortes doses incluent :

²³ Fant, R.V. et coll. (1998) « Acute and residual effects of marijuana in humans. » *Pharmacology, Biochemistry and Behavior*, 60, pages 777-784.

²⁴ Roques, B. (1999) *La dangerosité des drogues*. Paris :Odile Jacob, page 184.

²⁵ INSERM, *op. cit.*, page 203.

- anxiété voire crises de panique
- confusion ou désorientation
- vertiges, nausées ou vomissements
- convulsions
- dépersonnalisation
- hallucinations
- paranoïa
- psychose aiguë

Ces phénomènes sont relativement rares (moins de 1 pour mille des admissions psychiatriques). Surtout, il est difficile d'établir que le cannabis en soit la cause. En effet, dans la plupart des cas, l'hypothèse la plus plausible est que ces sujets étaient déjà prédisposés, voire avaient déjà eu des expériences psychotiques ou schizophréniques. La consommation d'autres substances, alcool, autres drogues illicites, ou médicaments, peut aussi jouer un rôle important.

*« La relation entre l'usage de cannabis et la psychose est une question très controversée. Actuellement, nous ne disposons pas d'un corpus d'études comparables, fiables et produisant des conclusions similaires. Les résultats des études disponibles sont complexes ou ambigus et les opinions personnelles des chercheurs colorent les interprétations. Il nous faut donc améliorer notre base de connaissance scientifique. Néanmoins, il y a un consensus assez répandu, quoique incomplet, sur la possibilité que l'usage intensif ou l'intoxication au cannabis puisse provoquer des états psychotiques transitoires chez des sujets autrement normaux. Nous ignorons la fréquence de cette condition et sommes réduits à des hypothèses sur ses mécanismes. »*²⁶

Suivant l'expertise collective de l'INSERM, on peut établir ce qui suit :

*« Les troubles psychotiques induits par la prise de cannabis sont des épisodes psychotiques brefs, d'une durée inférieure à deux mois, voire quatre mois, parfois à une semaine. La personnalité prémorbide ne présente pas de caractère pathologique. Les consommateurs réguliers sont plus exposés que les consommateurs occasionnels. Le début est brutal, en deux ou trois jours, après ou sans augmentation récente des prises de toxique, avec parfois un facteur précipitant psychologique ou somatique. Certains symptômes apparaissent plus spécifiques : troubles du comportement, agressivité, hallucinations visuelles, aspect polymorphe du délire sur des thèmes divers, désinhibition psychomotrice. (...) Par rapport au trouble schizophrénique, les sujets sont plus jeunes, 20 à 30 ans plutôt que 25 à 30 ans, avec une surreprésentation d'hommes mal socialisés. »*²⁷

²⁶ Hanak, C. et coll. (2002) « Cannabis, mental health and dependence. » in Pelc, I. (éd.), *International Scientific Conference on Cannabis*, Bruxelles.

²⁷ INSERM, *op. cit.*, page 124.

Par contre, ici aussi, les données sont relativement contradictoires et, selon le professeur Roques, il est permis de penser que cet effet soit plus répandu chez les personnes présentant déjà des troubles psychiques.²⁸

CONSÉQUENCES DE LA CONSOMMATION CHRONIQUE

La plupart des travaux consultés en pharmacologie, toxicologie et psychiatrie, parlent d'effets chroniques. Nous préférons, pour notre part, parler des *conséquences* induites par une consommation chronique et ce, pour deux raisons. Premièrement, parce que ce n'est pas tant la substance elle-même que la manière de l'utiliser qui induit ces conséquences. Il ne s'agit plus alors des effets de la substance mais des conséquences découlant éventuellement de son utilisation répétée, voire massive. Deuxième raison, les consommateurs chroniques de cannabis comptent, comme nous l'avons vu au chapitre 6, pour une part mineure (souvent moins de 10 %) des usagers vie de cannabis. Il en découle que les conséquences dont il est question dans cette section portent sur cette petite partie de la population des usagers et non sur la substance elle-même.

Cette distinction nous apparaît fondamentale parce qu'il est d'usage fréquent, à tous les niveaux du discours public – qu'il s'agisse de celui des politiques, du grand public, comme des experts – d'incriminer la substance – ici le cannabis, là l'alcool ou les médicaments, voire les autres drogues illicites – quand en fait il faut *apprendre à distinguer entre des formes et manières d'usage*. On parlera alors de conduites à risque, variables selon les substances certes, qui ne dépendent pas que des propriétés intrinsèques de la substance, mais relèvent, dans une approche globale, de la relation entre la substance et sa place dans la société (intégrée ou non), des caractéristiques de l'individu, et de la société dans laquelle la consommation se produit.²⁹ On comprendra évidemment par là que *nous distinguons, pour le cannabis comme on le fait pour l'alcool, entre usage, usage à risque et usage excessif* (ou abus)³⁰, et que nous refusons l'équivalence souvent faite entre usage et abus où toute forme d'usage est déjà un abus. En même temps, nous sommes conscients aussi du flou qui continue d'entourer ces diverses conduites – ou pratiques – et qu'il n'existe pas de frontière clairement définie ni encore moins universelle entre l'usage, l'usage nocif et la dépendance. Aux fins de ce chapitre, les conséquences dont il est question dans les trois sections suivantes

²⁸ Roques, B., *op. cit.*, page 186.

²⁹ Cette question sera discutée plus amplement au prochain chapitre. Il suffira pour le moment de renvoyer le lecteur au travail de Reynaud et coll. (1999) *Les pratiques addictives. Usage, usage nocif et dépendance aux substances psycho-actives*. Paris : La Documentation française.

³⁰ Nous avons établi au chapitre précédent sur les usages et les usagers les paramètres à partir desquels nous faisons cette distinction et nous y revenons dans la conclusion ; nous verrons plus loin dans ce chapitre-ci que la dépendance est une conséquence d'un usage excessif.

renvoient, sans plus de précision, à l'usage chronique (qui regroupe donc les usages à risque et l'usage excessif).

Conséquences physiologiques de l'usage chronique

Les principales conséquences physiologiques de l'usage chronique du cannabis traitées dans la littérature scientifique concernent le système respiratoire et le pouvoir cancérogène du cannabis, le système immunitaire, le système endocrinien et les fonctions de reproduction, et de manière moins importante le système cardiovasculaire.

Conséquences sur le système respiratoire

La fumée de la nicotine du tabac et des cannabinoïdes du cannabis, partagent des propriétés irritantes voire carcinogènes communes. Quoique déjà ancienne, une analyse comparative de ces composants a démontré que la concentration de certains composants à fort pouvoir cancérogène comme le benzopyrène et le benzathracène est plus importante dans la fumée de cannabis que dans celle du tabac.³¹ Une étude plus récente citée par l'INSERM confirme cette concentration plus élevée de benzopyrène : 2,9 microgrammes/100 joints contre 1,7 pour 100 cigarettes.³² Bien entendu, on objectera que les consommateurs de tabac fument généralement beaucoup plus de cigarettes quotidiennes que les usagers de marijuana même chroniques, que c'est le volume total de substances toxiques inhalées au fil du temps qui compte, et qu'il peut être difficile de distinguer les effets du cannabis de ceux du tabac puisque les joints fumés contiennent souvent les deux produits et que les consommateurs de cannabis sont aussi souvent des fumeurs de tabac.³³

Notons cependant d'autres caractéristiques préoccupantes quant aux effets potentiels du cannabis fumé sur les voies respiratoires. D'abord, la concentration de benzopyrène dans le goudron de marijuana est 70 % plus élevée que celle d'un même poids de goudron de tabac. De plus, à poids égal de produit, le cannabis fournit jusqu'à 4 fois plus de goudron que le tabac fort. Selon une étude citée par l'INSERM les goudrons d'un joint varient entre 40 et 56 mg/cigarette tandis que la dose admissible pour une cigarette de tabac européenne est de 12 mg.³⁴ Ensuite, une cigarette de marijuana sera généralement fumée de façon beaucoup plus complète qu'une cigarette de tabac, l'inhalation – partie importante du rituel – est plus profonde et la fumée retenue plus longtemps dans les poumons et la température de combustion du cannabis plus élevée que celle du tabac. Ainsi, le pourcentage de goudron déposé dans les poumons est plus élevé après consommation de cannabis fumé (> 80 %) qu'après inhalation de tabac (64 %) et les dépôts seraient même plus élevés dans le cas de

³¹ Institute of Medicine (1982) *Marihuana and Health*. Washington, DC : National Academy of Sciences.

³² INSERM (2001), *op. cit.*, page 222.

³³ Ce sont là par exemple les critiques qu'ont faites Zimmer L., et J.P. Morgan (2000 pour la version française ; 1997 pour l'original américain) *Marijuana. Mythes et réalités*. Paris : Georg éditeur.

³⁴ *Ibid.*, page 221.

cannabis moins concentré en THC probablement parce que les fumeurs tirent davantage sur le joint.³⁵

Selon le rapport de l'INSERM, la consommation chronique de cannabis « entraîne des perturbations bronchiques indiscutables (...) bronchite chronique avec toux chronique, expectoration et râles sibilants »,³⁶ conclusion partagée par l'Institut de médecine des États-Unis dans son récent rapport sur la marijuana³⁷ ainsi que par l'OMS.³⁸ D'autre part, les macrophages (cellules qui attaquent les corps étrangers) des alvéoles pulmonaires semblent perdre leur pouvoir de neutralisation des bactéries lorsqu'exposés à la fumée de cannabis, d'où une sensibilité plus grande des bronches et des poumons aux infections bactériennes. Selon certains auteurs, une cigarette de cannabis pourrait causer théoriquement autant de dommages que 4 à 10 cigarettes de tabac.³⁹ Ces données sur la diminution de la capacité des macrophages alvéolaires de détruire les bactéries suggèrent aussi que le cannabis pourrait avoir une action immunodépressive diminuant la capacité de l'organisme, ici les poumons, à lutter contre les cellules cancérogènes.

Les travaux de Tashkin notamment mais aussi d'autres chercheurs ne sont pas aussi affirmatifs quant aux effets du cannabis sur les voies respiratoires. Ainsi, une étude récente de Tashkin sur de grands fumeurs de cannabis a démontré qu'il n'y avait pas de diminution du rapport volume expiratoire maximal par seconde/capacité vitale même chez les fumeurs de 3 joints par jour comparativement aux fumeurs de tabac qui enregistraient une perte significative.⁴⁰ L'équipe de Tashkin remet aussi en question le développement d'emphysème chez les usagers de cannabis et l'obstruction des bronchioles.⁴¹ De même une étude du *Kaiser Permanent Medical Care Program* a démontré que les usagers quotidiens de cannabis qui ne consommaient pas de tabac étaient à peine plus sujets que les non-fumeurs (36 % c 33 %) à consulter pour problèmes de rhumes, gripes ou bronchites.⁴² Notons aussi que les études sont à ce jour contradictoires sur l'addictivité des effets du tabac et du cannabis.

Potentiel cancérogène

En ce qui concerne le potentiel cancérogène du cannabis, on distingue entre les effets cancérogènes de la fumée du cannabis – source potentielle de cancer du poumon

³⁵ *Ibid.*, page 221

³⁶ *Ibid.*, page 218.

³⁷ Joy, J.E. et coll., (1999) *Marijuana and Medicine : Assessing the Science Base*. Washington, DC : Institute of Medicine.

³⁸ WHO (1997) *op. cit.*

³⁹ Ben Amar (sous presse), *op. cit.*, page 18.

⁴⁰ Tashkin, D.P. et coll., (1997) « Heavy habitual marijuana smoking does not cause an accelerated decline in FEV1 with age: a longitudinal study. » *American Journal of Respiratory Critical Care*, 155, pages 141-148.

⁴¹ Voir Zimmer et Morgan, *op. cit.*, page 148.

⁴² Polen, M.R. (1993) « Health care use by frequent marijuana smokers who do not smoke tobacco. » *Western Journal of Medicine*, 158, pages 596-601.

notamment – et les effets mutagènes du THC sur les cellules. Selon la majorité des auteurs, le THC lui-même ne semble pas cancérogène.⁴³ Par contre, la fumée de cannabis, comme celle du tabac, semble effectivement susceptible d'augmenter la propension aux tumeurs cancéreuses.

Les travaux de Fliegel⁴⁴ indiquent que des modifications histologiques que l'on considère être des précurseurs de carcinomes sont présentes chez les fumeurs chroniques de cannabis. Ces données sont aussi soutenues par des cas cliniques de cancers du tractus supérieur aérodigestif chez des jeunes adultes fumeurs de cannabis, cancers de types rarement observés chez des sujets jeunes. Ainsi :

- Treize cas de cancers du cerveau et du cou chez de jeunes adultes de moins de 40 ans, dont onze étaient des fumeurs quotidiens de cannabis⁴⁵;
- Dix cas de cancers du tractus respiratoire supérieur chez de jeunes adultes de moins de 40 ans dont sept étaient des consommateurs réguliers probables de cannabis;⁴⁶ et
- Deux cas de carcinome de la langue chez des hommes entre 37 et 52 ans dont le seul facteur de risque commun était la consommation régulière et journalière de cannabis.⁴⁷

On constate d'abord le petit nombre de cas, surtout lorsqu'on compare au grand nombre d'usagers de cannabis. Ces cas cliniques présentent aussi un certain nombre de limites importantes : aucun ne comparait la prévalence de cancer avec un groupe de contrôle ni n'évaluait la consommation de cannabis de manière standardisée. Les interprétations sont aussi limitées par le fait que les patients étaient aussi fumeurs de tabac et usagers d'alcool.

Les données disponibles semblent indiquer que la conséquence d'un usage chronique et intense de cannabis (plusieurs joints par jour sur plusieurs années) serait semblable à celle de la cigarette en termes de risques cancérogènes sur les voies

⁴³ Voir notamment les conclusions de INSERM (2001), *op. cit.* ; ainsi que le rapport de Wheelock (2002) *op. cit.*, pour le Comité du Sénat.

⁴⁴ Fliegel S.E.G. et coll., (1988) "Pulmonary pathology in marijuana smokers", in Chesher G. et coll. (eds), *Marijuana: An International Research Report*, National Campaign Against Drug Abuse, Monograph 7, 43-48, Canberra, Australian Government Publishing Service; et Fliegler, SEG et coll., (1997) "Tracheo-bronchial histopathology in habitual smokers of cocaine, marijuana or tobacco" *Chest*, 112, pages 319-326.

⁴⁵ Donald P.J. (1991) « Marijuana and upper aerodigestive tract malignancy in young patients », in Nahas, G. et C. Latour (eds.), *Physiopathology of Illicit Drugs: Cannabis, Cocaine, Opiates*, pages 39-54, Oxford ; et (1991) « Advanced malignancy in the young marijuana smoker », in Friedman, H. et coll. (eds.), *Drugs of Abuse, Immunity and Immunodeficiency*, pages 33-36, London.

⁴⁶ Taylor, F.M. (1988) « Marijuana as a potential respiratory tract carcinogen: A retrospective analysis of a community hospital population », *Southern Medical Journal* 81, pages 1213-1216.

⁴⁷ Caplan, G.A. et B.A. Brigham (1990) « Marijuana smoking and carcinoma of the tongue: Is there an association? » *Cancer* 66, pages 1005-1006.

respiratoires ainsi que la bouche, la langue et l'œsophage.⁴⁸ L'on considère généralement que le THC modifie les fonctions de certaines cellules, notamment les lymphocytes, les macrophages et les cellules polymorphonucléiques, notamment dans les modèles *in vitro*. La poursuite d'études contrôlées est toutefois largement reconnue comme une priorité de recherche dans ce domaine.⁴⁹

Conséquences sur le système immunitaire

Hormis les conséquences possibles sur le système de défense des voies respiratoires causées par la fumée essentiellement, il n'y a pas de données concluantes sur les effets du cannabis sur le système immunitaire. Certaines études chez les rongeurs démontrent que les cannabinoïdes, y compris le THC, modifient à haute dose l'immunité cellulaire. Dans certains cas, l'activité expérimentale des cannabinoïdes est immunosuppressive, dans d'autres cas elle est stimulante. Ces variations dépendent de facteurs expérimentaux tels que la concentration de la substance, le moment et la durée de l'administration et le type de fonction cellulaire étudiée. Très peu de travaux ont été faits sur des humains. Selon le rapport de l'OMS, s'il est clair que les cannabinoïdes ont des propriétés immunomodulatrices, il est aussi clair que le système immunitaire est résistant à cette substance. Plusieurs des effets sont relativement minimes et totalement réversibles, et ne se font sentir qu'à des doses plus élevées que celles requises pour les effets psychoactifs de la drogue chez les humains. Enfin, toujours selon le rapport de l'OMS, même en ce qui concerne les effets immunomodulateurs de la fumée de cannabis, les études ne sont pas concluantes et les doses utilisées dans les schémas expérimentaux avec des animaux sont difficilement comparables à celles que consomment les humains. Le rapport conclut que des études rigoureuses sur cette question sont nécessaires.⁵⁰

Conséquences sur le système endocrinien et la reproduction

Les anomalies endocriniennes sont bien répertoriées chez l'animal : chez le rat mâle, on note, à haute dose, une diminution de sécrétion de testostérone avec atrophie testiculaire, des perturbations de la production de sperme, de sa mobilité et de sa viabilité, et une modification du comportement sexuel. Le cycle ovulatoire de la femelle est altéré. Chez l'humain, les résultats sont contradictoires, notamment parce que les observations ne sont pas constantes d'une étude à l'autre mais aussi parce que des changements similaires se produisent suite à l'absorption de drogues prescrites. De plus, les modifications observées sont souvent à la limite de la normale et leurs conséquences cliniques restent discutées.⁵¹

⁴⁸ MacPhee, D., (1999) «Effects of marijuana on cell nuclei», in Kalant, H. et coll. (eds.), *The Health Effects of Cannabis*, Toronto : Addiction Research Foundation.

⁴⁹ Notamment WHO (1997), *op. cit.* ; Hall, W. et N Solowij (1998) «Adverse effects of cannabis » *The Lancet*, 352, no 9140, page 6 ; INSERM (2001), *op. cit.*

⁵⁰ WHO (1997), *op. cit.*, page 26.

⁵¹ INSERM (2001), *op. cit.*, pages 219-220.

Au niveau de la reproduction, le fait que les composés actifs du cannabis passent la barrière placentaire est bien acquis. Néanmoins, la question des effets potentiels du cannabis sur la descendance des femmes est loin d'être résolue et ce d'autant que les études sont méthodologiquement pauvres. Ainsi, lorsqu'on étudie les femmes enceintes usagers de cannabis, elles proviennent souvent de milieux socioéconomiques faibles – et on sait par ailleurs que le niveau socioéconomique est un facteur discriminatoire du poids et de la taille des bébés – et il est difficile d'isoler l'effet d'autres facteurs, dont la consommation de tabac et d'alcool – dont on sait qu'ils sont des facteurs de risque de naissance prématurée et de poids et taille plus faibles. De fait, les études sur les fumeuses occasionnelles de cannabis ne démontrent pas de différence significative par rapport aux non fumeuses. Et au total, la plupart des études n'ont pas observé de différences significatives.⁵² Les rapports de l'OMS et de l'expertise collective de l'INSERM concluent néanmoins que, malgré les difficultés méthodologiques, il existe une évidence raisonnable que l'usage du cannabis durant la grossesse nuit au développement fœtal, notamment une réduction de la croissance et d'anomalies de comportements, mais que ces anomalies sont plutôt mineures.⁵³

Quant aux conséquences néonatales de la consommation de cannabis par les mères pendant la grossesse, les études longitudinales sur des cohortes d'enfants menées par l'équipe du psychologue Peter Fried à Ottawa depuis 1978⁵⁴ ne sont pas concluantes. Sur l'ensemble des mesures effectuées, il ressort plus de ressemblances que de différences entre les enfants des fumeurs et des non-fumeurs. Et lorsque des différences sont observées, elles sont mineures et il demeure impossible de dissocier les effets de diverses substances, notamment du tabac et de l'alcool. Enfin, ces études portent sur un petit échantillon d'enfants à partir duquel on ne peut généraliser. Une autre étude longitudinale, rapportée par l'INSERM, portant sur 636 sujets, conclut « *à une relation significative entre les troubles du comportement à l'âge de 10 ans et l'exposition prénatale au cannabis.* » Toutefois, le rapport de l'INSERM note aussi que « *(s)i les résultats de ces deux études semblent bien converger (...) il ne faut toutefois pas oublier que l'environnement postnatal peut jouer un rôle important dans la persistance des anomalies du comportement.* »⁵⁵

Conséquences sur le système cardiovasculaire

Il est possible que la prise chronique de cannabis entraîne des complications cardiovasculaires pour les personnes prédisposées. De fait, la prise de quantités importantes peut ralentir la fréquence cardiaque. De même, le cannabis peut avoir des effets similaires à ceux du tabac sur les fonctions cardiaques en augmentant le travail

⁵² Wheelock (2002), *op. cit.*, page 29.

⁵³ WHO (1997), *op. cit.*, page 24 ; INSERM, *op. cit.*, page 237.

⁵⁴ Fried, P.A. (1995) « Prenatal exposure to marijuana and tobacco during infancy, early and middle childhood : Effects and attempts at a synthesis. » *Archives of Toxicology*, 17 ; et Fried P.A. et B. Watkinson (1999) « 36- and 48-month neurobehavioral follow-up of children prenatally exposed to marijuana, cigarettes and alcohol. » *Journal of Deviant Behavior and Pediatrics*, 11, pages 49-58.

⁵⁵ INSERM (2001) *op. cit.*, page 235.

musculaire. D'autre part, certaines études mettent en évidence le rôle du monoxyde de carbone trouvé dans la fumée du cannabis sur les risques de complications cardiovasculaires.

Conséquences cognitives et psychologiques

Les principales conséquences cognitives et psychologiques de la consommation chronique de cannabis concernent les fonctions cérébrales relatives à la mémoire et aux compétences verbales et mathématiques, la motivation, et les désordres psychiatriques.

Fonctions cérébrales

Nous avons vu que le cannabis a des effets aigus sur la mémoire à court terme, l'attention et la concentration. La consommation chronique entraîne-t-elle à terme des effets qui pourraient être irréversibles sur les fonctions cognitives ? Ces questions soulèvent d'abord celle de la neurotoxicité du cannabis, définie comme « *une atteinte réversible ou irréversible de la structure et/ou des fonctions du système nerveux central (et/ou périphérique) par des agents physiques, chimiques ou biologiques.* »⁵⁶

Selon le professeur Roques :

*« La toxicomanie au cannabis n'entraîne pas de neurotoxicité. (...) Ainsi les résultats anciens suggérant des modifications anatomiques dans le cerveau des consommateurs chroniques de cannabis mesurées par tomographie n'ont pas été confirmés par les techniques modernes précises de neuro-imagerie. De même les altérations morphologiques dans l'hippocampe de rat après administration de doses très élevées de THC (Landfield et al., 1988) n'ont pas été retrouvées (Sliker et al., 1992). (...) Plusieurs études ont été consacrées aux effets du cannabis sur les potentiels évoqués et sur l'électroencéphalogramme chez l'homme. L'usage intermittent produit des changements réversibles dans les profils d'ondes α dans le cortex frontal probablement en rapport avec les états de somnolence induits par le THC. À très long terme (plus de quinze ans) et avec une forte consommation journalière, une augmentation dans l'activité frontale θ et une hyperfrontalité δ ont été observés (Struve et al., 1990, 1994). La relation éventuelle avec des changements comportementaux ou dans des tests neuropsychologiques n'est pas discutée ni, du reste, celle possible avec les effets anticonvulsivants du THC. »*⁵⁷

Les résultats des études rapportées par l'expertise collective de l'INSERM sont contradictoires, certaines observant des changements, d'autres non. Même lorsque des changements sont observés, ils sont souvent d'amplitude mineure et réversibles après une période d'abstinence. Le rapport de l'INSERM observe que les études utilisant les techniques de neuro-imagerie n'ont pas confirmé la présence d'une neurotoxicité du cannabis ni chez l'homme ni chez le babouin.⁵⁸ C'est donc par l'observation des

⁵⁶ Roques, B., (1999) *op. cit.*, page 73.

⁵⁷ *Ibid.*, page 187.

⁵⁸ INSERM, *op. cit.*, page 206

fonctions et des comportements que l'on sera encore le mieux à même d'examiner la question des effets neurologiques du cannabis.

Malheureusement, les études sont ici aussi contradictoires et les résultats non concluants. Des études réalisées dans les années 1970 dans des pays où la consommation de cannabis est traditionnelle (Jamaïque, Costa Rica, Inde) ne faisaient pas ressortir de différences significatives entre usagers et non-usagers sur les fonctions cognitives, tandis que des études plus récentes, notamment au Costa Rica dans les années 1980, démontraient des différences : « *En particulier, les usagers de longue date se rappelaient moins de mots d'une liste présentée auparavant et le temps de réponse était plus long.* »⁵⁹ Aux États-Unis, les études menées dans les années 1970 observaient des résultats contradictoires sur les fonctions mnésiques, tandis que des études plus récentes ont rapporté des déficits subtils de fonctions cognitives chez les grands consommateurs après une brève période d'abstinence. Certaines études démontrent aussi une persistance des perturbations mnésiques chez les adolescents après six semaines d'abstinence.⁶⁰

La plupart des études tendent à démontrer que les ex-consommateurs récupèrent globalement l'ensemble des fonctions cognitives, mais selon la durée de la consommation des perturbations subtiles pourraient persister, notamment sur la capacité à traiter des informations complexes.

Toujours selon l'expertise collective de l'INSERM, l'âge de début de la consommation pourrait être un facteur discriminant. Ainsi, une étude récente démontre la persistance de certaines perturbations de la fonction de balayage visuel (reliée à l'attention) chez les jeunes ayant commencé à consommer du cannabis avant l'âge de 16 ans, alors que ceux ayant commencé à consommer après 16 ans ne démontraient pas de différences avec les non-consommateurs.⁶¹

Au total, on ne peut guère établir que la consommation de cannabis aurait des conséquences négatives sur les fonctions cérébrales, même chez les consommateurs chroniques, sauf si la consommation débute avant l'âge de 16 ans.

La motivation

Certaines études suggèrent la présence d'un syndrome amotivationnel chez les usagers chroniques de cannabis, syndrome qui pourrait notamment affecter la performance des jeunes à l'école et des travailleurs en milieu professionnel. Dans son rapport de 1997, l'OMS souligne que l'état des connaissances n'a pas progressé depuis son précédent rapport en 1981 : le syndrome amotivationnel n'a toujours pas été clairement défini, ses effets ne sont toujours pas clairement distingués des effets de l'intoxication elle-même, et les données disponibles proviennent de rapports de cas cliniques sans groupe contrôle.⁶²

⁵⁹ *Ibid.*, page 204.

⁶⁰ *Ibid.*, page 205.

⁶¹ *Ibid.*, page 206.

⁶² WHO (1997), *op. cit.*, page 18.

Afin d'évaluer l'impact du cannabis sur la motivation, des chercheurs canadiens ont conçu une étude où les sujets recevaient du cannabis en échange d'un travail accompli. Même si elle est déjà ancienne, l'étude n'est pas moins intéressante. Ils ont observé que les sujets travaillaient moins efficacement immédiatement après avoir consommé du cannabis. Toutefois, leur niveau de productivité augmentait ensuite rapidement et surpassait les niveaux atteints lors des périodes d'abstinence. Bien que travaillant le moins d'heures, les sujets consommant le plus de cannabis n'étaient pas moins productifs parce qu'ils travaillaient avec plus d'ardeur. De plus, au cours de la période la plus intense de consommation, les sujets ont organisé une grève et ont négocié avec succès une augmentation de leurs « revenus », après laquelle ils ont travaillé avec encore plus d'intensité.^{63 64}

Les études ne permettent pas d'établir si les troubles de la motivation, lorsque constatés, sont antérieurs ou postérieurs à la consommation de cannabis ni si d'autres facteurs d'ordre émotionnel ou psychosocial ne sont pas davantage déterminants, voire même déterminants de la consommation chronique ou abusive de cannabis chez les jeunes notamment. Ces conclusions sont partagées par l'expertise collective de l'INSERM et par les auteurs du rapport présenté à la Conférence scientifique internationale sur le cannabis de mars 2002.⁶⁵

Désordres psychiatriques

Divers désordres psychiatriques ont été associés à la consommation chronique de cannabis : troubles de l'humeur et épisodes dépressifs, troubles anxieux, troubles de la personnalité, ainsi que des conditions plus sévères comme les psychoses et la schizophrénie. Pour chacune de ces situations, la conclusion que tirent les auteurs du rapport sur la santé mentale et le cannabis préparé pour la Conférence scientifique internationale sur le cannabis s'applique généralement :

« On peut expliquer de trois manières la relation entre le cannabis et les désordres de l'humeur. Premièrement, ils partagent des facteurs de risque communs de sorte qu'ils ne sont pas en relation causale. Deuxièmement, les désordres de l'humeur peuvent prédisposer les personnes à consommer du cannabis. Et troisièmement, le cannabis peut susciter ou augmenter les symptômes dépressifs. Il n'existe pas, à l'heure actuelle, de réponse claire à la question de savoir lequel arrive en premier. »⁶⁶

En ce qui concerne spécifiquement les troubles de l'humeur, les états dépressifs et les troubles anxieux, il semble vraisemblable qu'ils précèdent la consommation chronique. De toutes façons, les résultats des études sont extrêmement disparates :

⁶³ Miles G.C. et coll., (1974) *An Experimental Study of the Effects of Daily Cannabis Smoking on Behavioural Patterns*, Toronto : Addiction Research Foundation, Toronto.

⁶⁴ Campbell, I. (1976) *The Amotivational Syndrome and Cannabis Use With Emphasis on the Canadian Scene*, *Annals of the New York Academy of Sciences* 282, pages 33-36.

⁶⁵ INSERM, op.cit. ; Hanak, C. et coll., (2002) « Cannabis, mental health and dependence », Pelc, I. (éd.), *International Scientific Conference on Cannabis*, op. cit., page 61.

⁶⁶ Hanak, C. et coll (2002), op. cit. page 62.

pour les troubles de l'humeur chez les personnes dites dépendantes, la prévalence varie (selon les méthodes d'enquête), de 10 % à près de 50 % ; pour ce qui concerne les épisodes dépressifs majeurs dans les populations cliniques, les études rapportent des pourcentages variant de 4% à près de 20 %. Le rapport de l'INSERM propose un compte-rendu qui nous paraît beaucoup plus éclairant de la situation chez les adolescents :

« L'acquisition de nouvelles connaissances a permis de mieux mesurer le poids de la pathologie « dépressive précoce » en termes de souffrance individuelle et de santé publique. Sa prévalence, de l'ordre de 5 % à l'adolescence, en fait l'une des pathologies les plus fréquentes à cette période. Le risque suicidaire est élevé, et les déficits fonctionnels inhérents aux syndromes dépressifs sont sources de difficultés scolaires, de problèmes familiaux, de retraits vis-à-vis des pairs, dont les conséquences psychosociales peuvent être sévères surtout si le trouble se prolonge. De plus, la dépression du sujet jeune est rarement isolée : troubles anxieux ou troubles des conduites précèdent ou accompagnent souvent des épisodes dépressifs et peuvent leur survivre ; l'existence de troubles dépressifs est par ailleurs un facteur de risque d'addiction (alcool ou toute autre substance psychoactive) ou de troubles de conduite alimentaire. »⁶⁷

En ce qui concerne les troubles psychotiques et la schizophrénie, les deux sujets sont controversés, les méthodologies faibles, les données contradictoires et les interprétations souvent basées sur des modèles simplistes de la causalité. Si le cannabis peut dans certaines circonstances déclencher des épisodes psychotiques, ils sont le plus souvent courts et se résorbent rapidement. Quant à la schizophrénie, s'il est vrai que ces sujets ont une prévalence d'usage de cannabis plus élevée qu'en population générale, certains considèrent qu'il s'agirait d'un comportement d'automédication, tandis que d'autres considèrent que la consommation chronique de cannabis serait un facteur activateur du processus schizophrénique. La conclusion du rapport du professeur Roques nous semble la plus en accord avec les données existantes actuellement :

« Aucune pathologie mentale directement reliée à la surconsommation de cannabis n'a été signalée, ce qui différencie cette substance des psychostimulants tels que la MDMA, la cocaïne ou l'alcool dont l'usage excessif et répété peut donner lieu à des syndromes psychotiques caractéristiques. De même, le cannabis ne semble pas précipiter l'apparition de dysfonctionnements mentaux préexistants (schizophrénie, dépression bipolaire, etc.). »⁶⁸

En l'état, la plupart des rapports scientifiques s'entendent pour conclure qu'il convient de mener davantage de recherche, avec des protocoles plus rigoureux, permettant notamment la comparaison avec d'autres populations et d'autres substances.

⁶⁷ INSERM (2001), *op. cit.*, page 98.

⁶⁸ Roques, B., (1999) *op. cit.*, page 186.

Conséquences comportementales et sociales

Les principales conséquences comportementales et sociales examinées dans la littérature scientifique portent sur l'ajustement social et familial, l'agressivité, et la capacité à accomplir des tâches complexes.

Ajustement social et familial

Selon certaines études, la consommation chronique de cannabis pourrait avoir des conséquences sur l'ajustement social et familial. Ainsi, les usagers chroniques auraient plus de difficultés à conserver un emploi ; seraient plus souvent au chômage ; auraient plus de difficultés d'ajustement interpersonnel.⁶⁹

Toutefois, la plupart de ces études souffrent de problèmes méthodologiques et de difficultés d'interprétation. La plupart des études portent sur des échantillons de personnes qui proviennent majoritairement de milieux socioéconomiques défavorisés. Surtout, au delà de l'association statistique, il est difficile de déterminer dans quelle mesure d'autres facteurs ne jouent pas un rôle prépondérant où le cannabis est lui-même un symptôme et non une cause.

Agressivité

Contrairement à d'autres substances psychoactives, l'alcool et la cocaïne notamment, le cannabis n'entraîne pas d'agressivité. Certains auteurs, examinant les symptômes de sevrage lorsqu'une dépendance s'est installée, notent une irritabilité plus grande ; mais celle-ci est même moins importante proportionnellement que celle induite par le tabac.

Accomplir des tâches complexes

Aucune étude sur la consommation chronique de cannabis n'a pu établir que le cannabis entraîne des effets à long terme sur la capacité à accomplir des tâches complexes. Cette donnée est conforme à l'absence de neurotoxicité du cannabis.

⁶⁹ INSERM, (2001) *op. cit.*, pages 206-207.

TOLÉRANCE ET DÉPENDANCE

Qui pense drogue pense toxicomanie puisque, comme le rappelle F. Caballero, est drogue « toute substance susceptible d'engendrer la toxicomanie ». ⁷⁰ En France et en Europe, les observatoires créés ces dernières années s'appellent observatoires des drogues et des toxicomanies. Au Québec, l'organisme conseil créé par le Gouvernement se nomme Comité permanent de lutte à la toxicomanie. Partout, dans des textes de loi, dans des documents d'information, dans le langage courant, on retrouve le terme de toxicomanie. Pourtant, dès 1963, l'OMS recommandait d'abandonner ce terme pour cause d'imprécision et de référer plutôt aux états de dépendance physique ou psychique définis comme suit :

« La dépendance psychique est un « état dans lequel une drogue produit un sentiment de satisfaction et une pulsion psychique exigeant l'administration périodique ou continue de la drogue pour provoquer le plaisir ou éviter le malaise.

La dépendance physique est un « état adaptatif caractérisé par l'apparition de troubles physiques intenses lorsque l'administration de la drogue est suspendue ou que son action est contrecarrée par un antagoniste spécifique. Ces troubles, c'est-à-dire les symptômes de sevrage ou d'abstinence, se composent de symptômes et de signes de nature physique ou psychique qui sont caractéristiques de chaque drogue. » ⁷¹

De surcroît, avec l'extension de la notion de drogues à d'autres substances (produits pharmaceutiques, tabac, alcool), et avec l'extension du contrôle international des substances aux psychotropes, l'OMS crée, en 1969, une nouvelle définition sous le vocable de pharmacodépendance qui, s'il est d'abord d'application réduite aux seuls médicaments, en viendra avec le temps à recevoir une acception plus large :

« La pharmacodépendance est un état psychique et quelquefois physique résultant de l'interaction entre un organisme vivant et un médicament, se caractérisant par des modifications du comportement et par d'autres réactions qui comprennent toujours une pulsion à prendre le médicament de manière continue ou périodique de façon à retrouver ses effets psychiques et quelquefois d'éviter le malaise de sa privation. Cet état peut s'accompagner ou non d'une tolérance. Un même individu peut être dépendant de plusieurs médicaments. » ⁷²

Mais il est encore plus intéressant pour notre propos de citer des définitions plus anciennes de l'OMS portant ici sur les termes accoutumance et toxicomanie ou assuétude :

⁷⁰ Caballero, F. et Y. Bisiou (2000) *Droit de la drogue*. Paris, Dalloz, 2ème édition, page 3.

⁷¹ OMS (1964) *Comité d'experts des drogues engendrant la dépendance*, Série de rapports techniques, no 273, cité in Caballero et Bisiou, *op. cit.*, pages 5-6.

⁷² OMS (1969) *Comité d'experts de la pharmacodépendance*, Série de rapports techniques, no 407, cité in Caballero et Bisiou, (2000), *op. cit.*, page 6.

« L'accoutumance (en anglais *habituation*) est un état résultant de la consommation répétée d'une drogue. Ses caractéristiques sont notamment :

1. Un désir (mais non une obligation) de continuer à prendre de la drogue à cause de la sensation de bien-être qu'elle engendre ;
2. Peu ou pas de tendance à augmenter les doses ;
3. Une dépendance d'ordre physique à l'égard des effets de la drogue, mais absence de dépendance physique et par conséquent pas de syndrome d'abstinence ;
4. Des effets nuisibles qui, s'ils existent, concernent avant tout l'individu

La toxicomanie ou assuétude (en anglais *addiction*) est un état d'intoxication chronique ou périodique engendré par la consommation répétée d'une drogue naturelle ou synthétique. Ses caractéristiques sont notamment :

1. Un invincible désir ou un besoin de continuer à consommer de la drogue et de se la procurer par tous les moyens ;
2. Une tendance à augmenter les doses ;
3. Une dépendance psychique et généralement physique à l'égard des effets de la drogue ;
4. Des effets nuisibles à l'individu et à la société. »⁷³

L'intérêt de cette définition est de permettre mieux que les deux précédentes de distinguer entre les drogues créant principalement une accoutumance et celles créant la toxicomanie c'est-à-dire le besoin irrépressible d'en consommer. Or, comme nous le verrons dans ce chapitre, le cannabis correspond bien davantage aux critères d'une substance susceptible de créer une certaine accoutumance et non la toxicomanie.

En plus de penser à toxicomanie, penser drogue c'est aussi penser substances illicites. Or, comme l'ont établi un large éventail de travaux et de plus en plus de pratiques, la distinction matériellement effective se situe sur les plans conjugués de la toxicité de la substance (sa dangerosité) et des usages (consommation, abus, excès) qui la caractérisent, et non sur le plan du statut juridique et symbolique de la substance.

Dépendance au cannabis

Établissons d'abord que les études animales sur la dépendance et le sevrage sont très peu pertinentes puisque la plupart utilisent des doses qui n'ont rien de commun avec celles que consomment les humains, même usagers chroniques. Par ailleurs, notons que les études sur les animaux naïfs (non expérimentés à d'autres drogues) n'ont pu établir un comportement d'autoadministration. Or, il s'agit de la seule technique permettant d'évaluer directement les propriétés renforçantes d'une molécule. L'une des explications probables tient à la demi-vie plasmatique longue du Δ^9 -THC, dont on sait qu'il est éliminé lentement par l'organisme (jusqu'à 27 jours comme nous l'avons vu au chapitre 5).⁷⁴ Notons encore que, même après l'administration de doses très élevées de

⁷³ OMS (1952) *Comité d'experts des drogues susceptibles d'engendrer la toxicomanie*, Série des rapports techniques, no 57, cité in Caballero et Bisiou (2000), *op. cit.*, pages 4-5.

⁷⁴ INSERM, (2001), *op. cit.*, pages 274-275.

Δ^9 THC, des signes somatiques de sevrage spontané ne sont pas observés chez le rongeur, le pigeon, le chien ou le singe.⁷⁵ Notons enfin que l'on connaît peu, somme toute, les mécanismes biophysiques et psychologiques de la dépendance.

La notion de dépendance au cannabis a fait l'objet de critiques tenant à son côté trop médical (tenant peu compte de l'inscription sociale différentielle des modes et contextes d'usage) et au raisonnement circulaire (par exemple, le fait que les drogues soient illégales fait que leur consommation est nécessairement illégale, alors même que ce critère est utilisé dans la nosologie psychiatrique comme l'un des symptômes de dépendance).⁷⁶ Néanmoins, un syndrome de dépendance au cannabis ne diffère pas, lorsque mesuré par les critères du DSM, du syndrome de dépendance à l'alcool ou à l'héroïne. De plus, établir la dangerosité relative du cannabis n'est pas contradictoire avec des objectifs de santé publique.

Les critères nosologiques du DSM-IV (*Diagnostic and Statistical Manual of Mental Illnesses*) de l'*American Psychiatric Association* demeurent sans doute les plus utilisés dans les études sur les dépendances, d'autant plus que la plus grande partie de la recherche sur les drogues est menée aux États-Unis et dans les pays anglo-saxons (Royaume-Uni, Australie, Canada...) qui utilisent cet instrument.

Le DSM IV distingue entre les critères d'abus de substance et les critères de dépendance. Nous les reproduisons ici d'après le rapport de l'INSERM.

Critères diagnostiques d'abus de substance d'après le DSM-IV

- A. Mode d'utilisation d'une substance conduisant à une altération du fonctionnement ou à une souffrance cliniquement significative caractérisée par la présence d'une au moins des manifestations suivantes au cours d'une période de 12 mois :**
1. Utilisation répétée d'une substance conduisant à l'incapacité de remplir des obligations majeures au travail, à l'école ou à la maison ;
 2. Utilisation répétée d'une substance dans des situations où cela peut être physiquement dangereux ;
 3. Problèmes judiciaires répétés liés à l'utilisation d'une substance ;
 4. Utilisation de la substance malgré des problèmes interpersonnels ou sociaux, persistants ou récurrents, causés ou exacerbés par les effets de la substance.
- B. Les symptômes n'ont jamais atteint, pour cette classe de substances, les critères de dépendance à une substance.**

⁷⁵ *Ibid.*, page 270.

⁷⁶ Cohen, P., directeur du Centre de recherche sur les drogues de l'École des sciences sociales de l'Université d'Amsterdam, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 28 mai 2001, fascicule 3 ; aussi Alexander, B.K., professeur, département de psychologie, Université Simon Fraser, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 23 avril 2001, fascicule 1.

Critères diagnostics de dépendance à une substance d'après le DSM-IV

Mode d'utilisation inadéquat d'une substance conduisant à une altération ou à une souffrance cliniquement significative, caractérisée par la présence d'au moins trois des manifestations suivantes au cours d'une période continue de 12 mois :

1. Tolérance, définie par l'un des symptômes suivants :
 - a. Besoin de quantités notablement plus fortes de la substance pour obtenir une intoxication ou l'effet désiré ;
 - b. Effet notablement diminué en cas d'utilisation continue d'une même quantité de substance.
2. Sevrage, caractérisé par l'une ou l'autre des manifestations suivantes :
 - a. Syndrome de sevrage caractéristique de la substance ;
 - b. La même substance (ou une substance très proche) est prise pour soulager ou éviter les symptômes de sevrage.
3. La substance est souvent prise en quantité plus importante ou pendant une période plus prolongée que prévu ;
4. Il existe un désir persistant, ou des efforts infructueux, pour diminuer ou contrôler l'utilisation de la substance ;
5. Beaucoup de temps est passé à des activités nécessaires pour obtenir la substance, à utiliser le produit ou à récupérer de ses effets ;
6. Des activités sociales, professionnelles ou de loisirs importantes sont abandonnées ou réduites à cause de l'utilisation de la substance ;
7. L'utilisation de la substance est poursuivie bien que la personne sache avoir un problème psychologique ou physique persistant ou récurrent, susceptible d'avoir été causé ou exacerbé par la substance.

L'existence d'un syndrome de dépendance au cannabis chez les humains peut être inférée selon diverses méthodes : les enquêtes épidémiologiques et les études cliniques (qui utilisent le plus souvent les critères du DSM), et la demande de traitement.

Enquêtes épidémiologiques

Certaines études épidémiologiques indiquent que la consommation de cannabis peut mener à une dépendance psychologique. Dans certains cas, on estime que la moitié des usagers chroniques développeraient une dépendance de ce type.⁷⁷ Les personnes consommant du cannabis sur une base journalière pendant plusieurs mois seraient plus à risque de développer une dépendance.⁷⁸ L'interprétation et la comparaison des diverses études entre elles sont difficiles parce que le dénominateur n'est pas toujours comparable ou même spécifié (dans certains cas, il s'agit de la population générale, dans d'autres des usagers de cannabis, et dans ce dernier cas on ne distingue pas toujours entre usagers à vie, récents et réguliers). Les auteurs ne précisent pas toujours non plus si la dépendance est récente ou à vie.

⁷⁷ WHO (1997) *op. cit.*

⁷⁸ Channabasavanna, M, et coll., (1999) « Mental and behavioural disorders due to cannabis use », in Kalant H. et coll. (eds.), *The Health Effects of Cannabis*, Toronto : CAMH.

Aux États-Unis, plusieurs enquêtes ont été menées sur la fréquence d'usage de diverses substances psychoactives et la dépendance. L'étude *Epidemiological Catchment Area* a permis d'interviewer près de 20 000 personnes dans cinq études au cours des années 1980. La prévalence (en population générale) de dépendance au cannabis serait de 4,4 %.⁷⁹ L'étude *National Comorbidity Survey*, enquête en population générale sur plus de 8 000 sujets entre 15 et 55 ans entreprise entre 1990 et 1992 pour estimer la comorbidité entre l'abus de substances et d'autres désordres mentaux, a aussi estimé la prévalence de la dépendance. Pour les besoins de l'enquête, les critères du DSM ont été utilisés et la dépendance était observée lorsque les répondants présentaient au moins trois critères sur neuf. Selon cette étude, 4,2 % des 15-54 ans présentent une dépendance au cannabis (14 % à l'alcool et 24 % au tabac). Parmi ceux qui ont consommé du cannabis au moins une fois au cours de leur vie (46 %), 9 % sont considérés dépendants, contre 32 % pour le tabac et 15 % pour l'alcool. La dépendance au cannabis est plus forte chez les hommes que chez les femmes (12 % c 5,5 % des usagers), et chez les 15-24 que chez les autres (15 % c 8 %).⁸⁰ Rassemblant les résultats de trois grandes enquêtes auprès des ménages (près de 88 000 répondants de 12 ans et plus) sur la consommation de substances psychoactives Kandel et coll.,⁸¹ observent que 8 % des usagers de cannabis au cours de la dernière année (0,7 % de l'échantillon) sont repérés comme dépendants.

En Nouvelle-Zélande, une étude longitudinale sur une cohorte de 1 265 enfants nés en 1977 en région urbaine suivis depuis la naissance a révélé qu'à l'âge de 21 ans pas moins de 70 % avaient utilisé du cannabis. De ceux-ci, 13 % avaient eu, au cours de leur vie, un problème de dépendance mesuré par le DSM-IV.⁸² Une autre étude néo-zélandaise sur une cohorte de 1 000 personnes a observé des résultats similaires : à l'âge de 21 ans 62 % avaient consommé du cannabis, et 70 % à 26 ans. La prévalence de dépendance selon les critères du DSM III-R passe de 3,6 % à 18 ans à 9,6 % à 21 ans (soit près de 15 % des usagers).⁸³

⁷⁹ Anthony J.C. et J.E. Helzer (1991) « Syndromes of drug abuse and dependence », in Robins L.N. et D.A. Regier (eds.), *Psychiatric Disorders in America*, New York, Free Press, pages 116-154.

⁸⁰ Anthony, J.C., et coll., (1994) « Comparative epidemiology of dependence on tobacco, alcohol, controlled substances and inhalants : basic findings from the National Comorbidity Survey. » *Experimental and Clinical Psychopharmacology*, 2, pages 244-268.

⁸¹ Kandel, D., et coll., (1997) « Prevalence and demographic correlates of symptoms of last year dependence on alcohol, nicotine, marijuana and cocaine in the US population. » *Drugs, Alcohol and Dependency*, 44, pages 11-29. Voir aussi Kandel D. et M. Davies, (1992) « Progression to regular marijuana involvement: Phenomenology and risk factors for near daily use », in M. Glantz and R. Pickens (eds.), *Vulnerability to Drug Abuse*, pages 211-253, Washington DC, American Psychological Association.

⁸² Fergusson, D.M. et L.J. Horwood (2000) « Cannabis use and dependence in a New Zealand birth cohort. » *New Zealand Medical Journal*, 113, pages 156-158

⁸³ Poulton, R., et coll., (2001) « Persistence and perceived consequences of cannabis use and dependence among young adults : implications for policy. » *New Zealand Medical Journal*, 114, pages 13-16.

En Australie, une enquête en population générale auprès de plus de 10 000 personnes âgées de plus de 18 ans a démontré qu'environ 1,5 % des usagers au cours de la dernière année et 20 % des usagers actuels présentaient des signes de dépendance selon le DSM-IV.⁸⁴

Aux Pays-Bas, une étude sur un échantillon de la population nationale de 18 à 65 ans (7 000 sujets) a démontré que 10 % des usagers avaient eu des signes de dépendance au cours de leur vie.⁸⁵

Études cliniques

Les résultats des études cliniques peuvent difficilement être généralisés mais il est intéressant de voir dans quelle mesure ils se rapprochent des résultats des études épidémiologiques. Kosten a examiné la validité des critères du DSM-III R pour identifier les syndromes de dépendance à diverses substances psychoactives dont le cannabis. Il a observé une forte cohérence des critères pour les syndromes de dépendance à l'alcool, à la cocaïne et aux opiacées. Les résultats étaient plus équivoques sur le cannabis. Une analyse critérié a permis d'identifier qu'il y avait trois dimensions au syndrome de dépendance au cannabis (1) la compulsion – indiquée par une modification des activités sociales attribuable à la drogue; (2) une difficulté à arrêter – révélée par l'incapacité à réduire la consommation, le retour aux niveaux antérieurs après cessation temporaire et un degré de tolérance aux effets; et (3) des indices de sevrage – révélés par leur disparition lors d'une re-consommation et l'usage continue malgré des difficultés reconnues.⁸⁶

Études auprès d'usagers au long cours

Au Canada, une étude du professeur Hathaway menée entre octobre 2000 et avril 2001, tente d'identifier les usages à problème et la dépendance chez les usagers réguliers à partir des critères diagnostics du DSM-IV.⁸⁷ L'étude porte sur un échantillon de 104 personnes (64 hommes et 40 femmes) âgées entre 18 et 55 ans (âge moyen de 34 ans); 80 % avaient une consommation hebdomadaire et 51 % une consommation quotidienne au cours des 12 derniers mois, et près de la moitié (49 %) déclaraient consommer une once ou plus (28 grammes) en moyenne par mois. Interrogés sur les raisons de leur consommation, les participants citent : pour relaxer (89 %), pour se sentir bien (81 %), pour mieux apprécier la musique ou les films (72 %), pour contrer l'ennui (64 %) et pour favoriser l'inspiration (60 %).

⁸⁴ Swift, W. et coll., (2001) « Cannabis use and dependence among Australian adults : results from the National Survey of Mental Health and Wellbeing. » *Addiction*, 96, pages 737-748.

⁸⁵ Van Laar, M., et coll., (2001) *Nationale Drug Monitor. Jaarbericht 2001*. Utrecht : NDM Bureau.

⁸⁶ T.R. Kosten et al., (1987) "Substance-use disorders in DSM-III-R", *British Journal of Psychiatry* 151, pages 8-19.

⁸⁷ Hathaway, A.D. (2001) « Cannabis effects and dependency concerns in long-term frequent users : a missing piece of the public health puzzle. » Transmis au Comité du Sénat sur les drogues illicites lors de la comparaison du professeur Hathaway devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 14 mai 2001, fascicule no2.

Interrogés sur les activités déviantes reliées à leur consommation de cannabis, la réponse la plus fréquente était de s'être trouvé dans des situations inconfortables pour se procurer du cannabis. Les autres activités mentionnées étaient : emprunter de l'argent, vendre du cannabis pour payer leur propre consommation, et travailler davantage. 6% avaient déjà eu des problèmes légaux reliés à leur consommation de cannabis. En ce qui concerne les critères de dépendance, 30 % des participants déclaraient avoir ressenti trois ou plus d'entre eux au cours de leur vie, 15 % au cours de la dernière année.

[Traduction] « (...) les problèmes les plus fréquemment associés au cannabis ont davantage trait aux perceptions qu'ont les usagers de l'usage excessif qu'aux impacts perçus de la drogue sur la santé, les obligations sociales et les relations ou d'autres activités. En accord avec la nature hautement subjective de cette évaluation, nous n'avons observé aucune corrélation significative entre les quantités ou la fréquence d'utilisation et le nombre d'items au DSM-IV. Lorsque les problèmes de dépendance au cannabis progressent au point de demander une aide formelle, la signification substantive de la perception de niveaux d'usage excessifs ne doit pas être sous-estimée. »⁸⁸

L'étude comparative de Cohen et Kaal sur des usagers au long cours discutée au chapitre précédent incluait aussi des données sur les symptômes de dépendance. Entre 21 et 24 % des répondants présentaient trois ou plus des critères du DSM IV au cours de leur vie. C'est ce que démontre le tableau suivant.

⁸⁸ Ibid., page 15.

**Nombre de réponses positives aux critères du DSM IV
Amsterdam, San Francisco, Bremen⁸⁹**

Nombre de critères	Au cours de leur vie				Au cours des 12 derniers mois			
	Amsterdam		San Francisco		San Francisco		Bremen	
	N	%	N	%	N	%	N	%
0	85	39	129	49	233	88	43	78
1	37	17	53	20	17	6	5	9
2	43	20	30	11	9	3	4	7
3	19	9	28	11	3	1	2	4
4	15	7	15	6	3	1	1	2
5	9	4	7	3				
6	8	4	3	1				
Total	216	100	265	100	265	100	55	100
Moyenne incl 0		1,5		1,2		0,2		0,4
Moyenne sans 0		2,5		2,3		1,8		1,9

Les auteurs notent aussi une corrélation significative entre la quantité consommée (en grammes) au cours de la période d'utilisation la plus intensive (au début de la vingtaine chez ces usagers expérimentés au long cours) et le nombre de critères rencontrés, corrélation qu'ils ne retrouvent cependant pas sur la consommation au cours de la dernière année.

Demande de traitement

Enfin, on peut examiner la dépendance indirectement par la demande de traitement. Évidemment, il ne s'agit que d'une mesure très indirecte et sûrement très imparfaite pour plusieurs raisons. La très grande majorité des usagers de cannabis en font un usage irrégulier, qui se termine au début de la vingtaine. Parmi ceux qui continuent et deviennent usagers réguliers, nous venons de voir qu'entre 10 % à 20 % présenteront des critères de dépendance. La plupart des usagers n'ont pas l'impression d'avoir besoin d'aide, ce que confirmerait leur capacité à arrêter l'usage sans recours extérieur. Enfin, parmi ceux qui demandent de l'aide, il peut y avoir à la fois l'influence de la disponibilité des services aussi bien que l'interaction avec d'autres consommations à problème, alcool, médicaments ou autres drogues ou avec d'autres désordres mentaux. De fait, il semble que dans une proportion importante des cas, les demandes de traitement liées au cannabis proviennent de personnes présentant des désordres multiples.

⁸⁹ Cohen, P.D.A. et H.L. Kaal, (2001) *The irrelevance of drug policy. Patterns and careers of experienced cannabis use in the population of Amsterdam, San Francisco and Bremen*. Amsterdam : University of Amsterdam, CEDRO, page 99.

Néanmoins, nous avons entendu des témoignages à l'effet que la demande de traitement pour problème de dépendance au cannabis serait en croissance et que cette augmentation pourrait être reliée au contenu en THC.

En Europe, la demande de traitement pour problème principal relatif au cannabis varie largement entre pays passant de 6 % en Espagne (l'un des pays où la consommation est la plus répandue et la plus tolérée) à 25 % en Belgique. La Suède, qui a pourtant un taux de consommation relativement faible, a une demande de traitement de 14 %, comparable à celui de la France (16 %) qui a pourtant un taux d'usage beaucoup plus élevé. Aux États-Unis, la demande est tout aussi variable selon les états, entre 5 % et 30 %.⁹⁰

Sévérité de la dépendance

La sévérité de la dépendance a été évaluée de différentes manières. Aux États Unis, une étude a examiné environ 1 100 sujets ayant consommé plus de 6 fois du cannabis et a évalué la sévérité de leur dépendance à partir des critères du DSM IV. Le niveau de dépendance (basse, intermédiaire ou élevée) correspondait au nombre de critères remplis.⁹¹ On obtient les résultats suivants :

Sévérité de la dépendance au cannabis en fonction de la consommation⁹²												
Dépendance (nombre de critères)	Répartition des sujets en fonction du type de consommation											
	Basse			Intermédiaire			Élevée			Total		
	T	A	C	T	A	C	T	A	C	T	A	C
Nulle (0-2)	18	88	85	14	45	53	5	8	35	13	47	59
Faible (3-4)	28	8	11	30	22	21	22	12	34	27	14	18
Modérée (5-6)	34	3	2	39	15	14	51	19	23	40	12	13
Sévère (7-9)	19	1	3	17	17	12	23	61	17	20	27	10

T = tabac ; A = alcool ; C = cannabis

On observe une situation cohérente où le lien entre consommation élevée et dépendance est plus faible pour le cannabis que pour le tabac et l'alcool, et où, au total, la dépendance pour le cannabis est la plus faible des trois substances.

⁹⁰ Rigter, H. et M. van Laar (2002) «Epidemiological aspects of cannabis use.» in Pelc I., (ed.) *International Scientific Conference on Cannabis*. Bruxelles.

⁹¹ Woody G.E. et coll., (1993) «Severity of dependence: Data from the DSM-IV field trials » *Addiction* 88, pages 1573-1579.

⁹² Reproduit d'après INSERM (2001) *op. cit.*, page 73.

Le professeur Roques quant à lui, propose trois classes de produits en termes de leur dangerosité : la première comprend l'héroïne, la cocaïne et l'alcool ; la deuxième les psychostimulants, les hallucinogènes, le tabac, les benzodiazépines ; et le cannabis est en retrait dans une classe à part. Il classe la dangerosité des drogues selon un ensemble diversifié de critères. Nous reproduisons en page suivante son tableau de la dangerosité des drogues.

Notons en terminant qu'il n'y a pas de dépendance physique connue au cannabis, même si le sevrage dans les cas les plus sévères s'accompagnera parfois de manifestations physiques tels des tremblements, une insomnie, une irritabilité, etc.

Facteurs de dangerosité des « drogues » (reproduit de Roques, B. (1999), page : 296

	Héroïne	Cocaïne	MDMA	Psycho-stimulants	Alcool	Benzo-diazépines	Cannabinoïdes	Tabac
Suractivation Dopaminergique	+++	++++	+++	++++	+	±	+	+
Hypersensibilité à la dopamine	++	+++	?	+++	±	?	±	?
Activation du système opioïde	++++	++	?	+	++	+	±	±
Dépendance physique	très forte	faible	très faible	faible	très forte	moyenne	faible	forte
Dépendance psychique	très forte	forte mais intermittente	?	moyenne	très forte	forte	faible	très forte
Neurotoxicité	faible	forte	très forte (?)	forte	forte	0	0	0
Toxicité générale	forte	forte	éventuellement très forte	forte	forte	très faible	très faible	très forte (cancer)
Dangerosité sociale	très forte	très forte	faible (?)	faible (exceptions)	forte	faible	faible	0
Traitements Substitutifs	oui	oui	non	non	oui	non recherché	non recherché	oui

La tolérance

De manière technique, la tolérance se définit comme suit :

« La propriété que possède l'organisme humain de supporter, sans manifester de réaction, l'administration de doses habituellement actives d'une substance déterminée. En matière de drogue, cette tolérance peut conduire à une augmentation des doses afin de retrouver l'effet recherché. »⁹³

Le développement d'une tolérance est associé à des modifications pharmacodynamiques. Dans certaines études animales, l'administration chronique de THC a réduit la densité des récepteurs dans certaines régions cérébrales⁹⁴, les augmentant dans d'autres ; ces effets seraient réversibles.⁹⁵

Chez l'homme comme chez l'animal, les études observent un phénomène de tolérance au cannabis. Toutefois, les données doivent être interprétées avec prudence dans la mesure où certaines études et des cas cliniques ont aussi observé que les usagers réguliers avaient besoin de moins de cannabis pour atteindre l'effet recherché.⁹⁶ Néanmoins, une étude de Wiesbeck et coll sur 5611 sujets rapporte que 16 % des consommateurs fréquents de cannabis ont eu une histoire de syndrome de sevrage.⁹⁷

C'est le phénomène de tolérance à la substance qui induit les symptômes de sevrage. Au cours des dernières années, les données cliniques sur le symptôme de sevrage chez les grands consommateurs de cannabis (plusieurs doses par jour de manière continue pendant plusieurs années) se sont accumulées. Les symptômes observés incluent l'agitation, la perte d'appétit, la nausée, les perturbations du sommeil, l'irritabilité ou l'hyperactivité et une augmentation de la température du corps.⁹⁸ Ces symptômes apparaissent après 24 heures d'abstinence, atteignent un pic après 2 à 4 jours et diminuent dans les 7 jours. Les symptômes sont nettement moins sévères et moins longs que pour les autres substances psychoactives. D'ailleurs, les études cliniques démontrent que la plupart des sujets continuent à mener leurs activités quotidiennes de manière normale.

⁹³ OMS (1969), in Caballero et Bisiou (2000), *op. cit.*, page 6.

⁹⁴ Rodriguez de Fonseca, F. et coll., (1994) « Downregulation of rat brain cannabinol binding sites after chronic delta-9-THC treatment », *Pharm. Biochem. Behav.* 47, pages 33-40.

⁹⁵ Westlake, T.M. et coll., (1996) « Chronic exposure to delta-9-THC fails to irreversibly alter brain cannabinoid receptors » *Brain Research*, 544, pages 145-149.

⁹⁶ Beardsley, R.M et coll., (1986) « Dependence on THC in rhesus monkeys », *Journal Pharmacol. Exp. Ther.*, 239 (2), pages 311-319.

⁹⁷ Wiesbeck, G.A., et coll., (1996) « An evaluation of the history of a marijuana withdrawal syndrome in a large population. » *Addiction*, 91 (10), pages 1573-1579.

⁹⁸ Kouri, E.M. et coll., (2000) « Abstinence symptoms during withdrawal from chronic marijuana use. » *Experimental and Clinical Psychopharmacology*, 8, pages 483-492.

Éléments de synthèse

Nous avons vu au chapitre 6 que les formes d'usage ne suivent pas un modèle unique, moins encore un modèle de progression du moins vers le plus. Même pour les usagers chroniques, la trajectoire d'usage est faite de pics et de creux, de périodes d'abstinence et de périodes de consommation intense. Nous avons vu aussi que les études épidémiologiques ne sont pas suffisamment sensibles pour tenir compte de l'interaction entre les multiples facteurs qui influencent les modèles de consommation. On comprendra que la conjonction de ces diverses difficultés rend difficile d'estimer la consommation problématique, plus encore la fréquence de la dépendance.

Il nous paraît cependant clair que le terme toxicomanie, déjà fortement critiqué, s'applique encore plus mal en ce qui concerne le cannabis. Avec ses référents physiologiques et ses relents moralistes, ce terme ne permet pas de saisir les comportements des usagers et par là d'informer adéquatement une politique publique axée sur la prévention et l'aide aux usagers ayant des problèmes. Il nous paraît clair aussi que la dépendance n'est que l'une parmi plusieurs conséquences de l'usage excessif et qu'en matière de cannabis elle ne doit pas être surestimée.

C'est pourquoi nous proposons de distinguer les usages en fonction de la conjonction d'au moins quatre facteurs : le contexte d'usage, la quantité consommée, la fréquence de l'usage ainsi que la durée et l'intensité.

Proposition de critères pour différencier les usages

	Contexte	Quantité	Fréquence	Durée et intensité
Expérimentation / Occasionnel	Curiosité	Variable	Quelques fois au cours de la vie	Aucune
Régulier	Récréatif, festif Surtout le soir Surtout en groupe	Quelques joints Moins d'un gramme par mois	Quelques fois par mois	S'échelonne sur quelques années mais rarement intensif
À risque	récréatif et occupationnel (pour aller à l'école, au travail, faire du sport...) Seul, le matin Moins de 16 ans	Entre 0,1 et 1 gramme par jour	Quelques fois par semaine, le soir, les fins de semaine surtout	S'échelonne sur plusieurs années avec des pics d'intensité élevée
Excessif	Occupationnel et problèmes personnels Usages dérégulés	Plus d'un gramme par jour	Plus d'une fois par jour	S'échelonne sur plusieurs années avec une intensité élevée continue pendant plusieurs mois à la fois

Tenant compte des limites de la base de connaissance épidémiologique, sur les tendances d'usage au Canada, nous sommes réduits à des estimations hautement spéculatives. Néanmoins, à titre indicatif, nous proposons les paramètres suivants :

- ❖ *Chez les adultes : nous avons estimé à environ 100 000 le nombre de personnes de plus de 18 ans qui consomment du cannabis quotidiennement,*
 - si on admet qu'entre 30 à 40 % d'entre eux consommeraient entre 0,1 et 1 gramme par jour, c'est dire qu'entre 30 000 à 40 000 seraient des usagers à risque ;
 - si on admet qu'entre 5 à 10 % consommeraient plus d'un gramme par jour, c'est dire qu'entre 5 000 et 10 000 adultes seraient des usagers excessifs.
- ❖ *Chez les jeunes de 12 à 17 ans, nous avons estimé qu'environ 225 000 feraient un usage quotidien.*
 - si on admet que tout usager de moins de 16 ans est usager excessif, et que les jeunes entre 12 et 15 ans qui consomment représentent environ 25 % des usagers de la classe d'âge des 12 – 17 ans, on peut estimer qu'environ 50 000 jeunes seraient usagers excessifs en raison de leur âge ;
 - si on estime que, du nombre restant soit environ 175 000 jeunes, environ 30 à 40 % consomment moins d'un gramme par jour, c'est donc environ 50 000 à 70 000 sont à risque ;
 - finalement, si entre 5 % et 10 % consomment plus d'un gramme par jour, c'est dire qu'entre 8 000 et 17 000 sont des usagers excessifs.

Nous sommes conscients que ces proportions ne tiennent pas compte des autres facteurs, notamment les contextes et la durée de l'usage. Nous ne pouvons que souhaiter que les enquêtes ultérieures que le Canada ne manquera pas de mener tenteront de mieux cerner la complexité des usages et la variabilité de leurs conséquences possibles.

CONCLUSIONS

Au total, sur la base de l'ensemble des données de recherche et des témoignages qu'il a entendus concernant les effets et conséquences de la consommation de cannabis le Comité conclut que l'état des connaissances permet de penser que, pour la vaste majorité des usagers récréatifs, la consommation de cannabis ne présente pas des conséquences néfastes sur leur santé physique, psychologique ou sociale à court ou à long terme.

De manière plus spécifique, cette conclusion s'appuie sur les conclusions suivantes :

Conclusions du chapitre 7

Effets aigus du cannabis

- Les effets immédiats du cannabis se caractérisent par un sentiment d'euphorie, de détente, de sociabilité; ils s'accompagnent d'une diminution de la mémoire à court terme, de la concentration et de certaines habiletés psychomotrices.

Distinctions entre les usages

- Aux fins de politique publique, le Comité ne considère pas utile les distinctions traditionnelles entre effets aigus et effets chroniques.
- De même, le Comité ne considère pas utile la dichotomie entre usage et dépendance.
- Les données de recherche ne permettent pas de distinguer clairement entre l'usage, l'usage à risque, et l'usage excessif.
- La quantité consommée est un indicateur, mais d'autres facteurs d'ordre psychosocial, et tenant au contexte d'usage et à la qualité de la substance, interviennent dans le passage de l'usage à l'usage à risque et à l'usage excessif.

Usage à risque et usage excessif chez les adultes

- Néanmoins, le Comité est d'avis que, pour les personnes de plus de 16 ans, l'usage à risque s'inscrit dans une fourchette entre 0,1 à 1 gramme par jour sur une période prolongée et qu'au delà, il s'agit d'un usage excessif qui peut entraîner des conséquences négatives sur la santé physique, psychologique ou sociale des usagers.
- Selon cette distinction, et selon les données épidémiologiques présentées au chapitre précédent, il est permis de penser qu'environ 100 000 Canadiens de plus de 16 ans pourraient avoir un usage à risque et environ 80 000 pourraient avoir un usage excessif.

Tout usage chez les moins de 16 ans est un usage à risque

- Le Comité est d'avis qu'en raison de ses effets potentiels sur le système cannabinoïde endogène et les fonctions cognitives et psychosociales, toute consommation chez les jeunes de moins de 16 ans est une consommation à risque.
- Sur la base de nos estimations, ce seraient environ 50 000 jeunes.
- Chez les jeunes entre 16 ans et 18 ans, est consommation excessive une consommation même non quotidienne mais qui est faite le matin, seul ou pendant les activités scolaires.

Conséquences de l'usage excessif

- L'usage excessif de cannabis fumé peut avoir certaines conséquences négatives sur la santé physique, notamment sur le système respiratoire (bronchites chroniques, cancer des voies respiratoires supérieures).
- L'usage excessif de cannabis peut entraîner des conséquences psychologiques négatives sur les usagers, notamment des

difficultés de concentration et d'apprentissage, ou, dans des cas rares et chez des personnes déjà prédisposées, déclencher des épisodes psychotiques ou schizophréniques.

- L'usage excessif de cannabis peut entraîner des conséquences sur la santé sociale des usagers, notamment leur insertion professionnelle et sociale et leur capacité à accomplir des tâches.
- L'usage excessif de cannabis peut entraîner une dépendance qui demandera un traitement ; toutefois, la dépendance induite par le cannabis est moins sévère et moins fréquente que la dépendance à d'autres substances psychoactives y compris l'alcool et le tabac.

CHAPITRE 8

CONDUITE SOUS L'EFFET DU CANNABIS¹

« Stan Thompson avait 18 ans quand, avec quatre autres adolescents de Kanata, il a été tué dans un terrible accident de voiture à Perth un beau jour d'été. Un jeune a été jugé responsable de cet accident mortel et a purgé huit mois d'une peine de 12 mois de prison. La consommation de cannabis et la conduite en état d'ébriété étaient la cause de l'accident. (...) L'année de la mort de Stan, son père, Greg Thompson, est allé dans les écoles secondaires locales pour parler de l'accident, dire pourquoi les choses avaient mal tourné et comment la tragédie aurait pu être évitée. (...) Son message est que la consommation de marijuana affecte et affectera toujours les facultés de quelqu'un qui est au volant. Il a supplié les jeunes de ne pas le faire. (...) La marijuana n'est pas une substance bénigne. Il y a très peu de recherches qui pourraient permettre à quiconque de déterminer le niveau de l'incapacité liée à la marijuana et l'affaiblissement des facultés de ceux qui en fument et conduisent, et encore moins le degré d'incapacité à conduire lié à la consommation de marijuana et d'alcool. Nous avons vu dans le sondage effectué au Manitoba que plus de la moitié des jeunes qui consomment de la marijuana le font dans des automobiles et pendant les heures de classe. Il n'existe pas de moyen technique ou scientifique pour mesurer l'incapacité provoquée par la marijuana. Nous n'avons ni la technologie, ni les données scientifiques, ni la recherche nécessaire. Nous n'avons pas non plus la législation qu'il faudrait. Des études faites en Colombie-Britannique révèlent la présence de marijuana dans le corps de 12 à 14 % des conducteurs impliqués dans des accidents mortels. Le gouvernement du Québec et la Société de l'Assurance automobile du Québec effectuent actuellement des enquêtes en sécurité routière dans le cadre desquelles des volontaires soumettent des échantillons d'urine ou de sang. Les résultats de ces tests démontrent la présence de marijuana dans les échantillons prélevés sur 12 à 14 % de ces conducteurs. »²

S'il est une question, autre que les effets de la consommation de cannabis sur les jeunes ou des effets d'une consommation excessive, susceptible de préoccuper la société et les gouvernements, il s'agit certainement de ses effets sur la conduite d'un véhicule. On connaît déjà les effets sur la circulation routière de l'alcool avec sa cohorte d'accidents avec blessés ou tués. Malgré les diminutions constatées ces

¹ Hormis les études spécifiques que nous avons consultées et qui feront l'objet des renvois appropriés, ce chapitre s'inspire largement des recensions réalisées par l'INSERM (2001) *op. cit.*; Ramaekers et coll., (2001) pour la Conférence scientifique internationale sur le cannabis in Pelc, I., *op. cit.*, et de Smiley (1999) dans Kalant, H., (éd.), *op. cit.*

² R.G. Lesser, surintendant principal, gendarmerie royale du Canada, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 29 octobre 2001, fascicule no 8, page 17.

dernières années, il sera facile d'admettre qu'un accident mortel causé par la consommation d'une substance est déjà un accident de trop.

Or, après l'alcool, le cannabis est la substance psychoactive la plus consommée, notamment chez les jeunes du groupe d'âge 16-25. Occasionnelle, la consommation se produit le plus souvent dans un contexte festif, lors des parties de fin de semaine, souvent accompagnée aussi d'alcool. Les personnes de cette catégorie d'âge sont aussi les plus susceptibles d'avoir un accident automobile, et sont aussi susceptibles d'accidents avec facultés affaiblies.

Nous avons vu que le cannabis affecte les habiletés psychomotrices pour une durée pouvant aller jusqu'à cinq heures après la consommation. Les effets psychoactifs du cannabis sont aussi dépendants de la dose, de la concentration en THC, ainsi que de la morphologie, de l'expérience et des attentes des usagers. Mais quels sont les effets spécifiques du cannabis sur la conduite de véhicules? Quels sont les effets de la combinaison d'alcool et de cannabis? Et quels sont les outils permettant de détecter la présence d'un taux de THC susceptible d'affecter significativement les facultés psychomotrices reliées à l'opération de véhicules?

Ici encore, les avis des témoins que le Comité a entendus divergent sur l'interprétation des résultats des études. Ainsi, l'association canadienne des policiers et policières nous a dit :

« La conduite automobile dans l'état de stupeur que provoque cette drogue réduit le jugement et la coordination motrice. Dans une étude portant sur des pilotes d'avion, dix pilotes brevetés, 24 heures après avoir fumé un joint contenant 19 mg de THC, soit une dose relativement légère, se sont soumis à des tests sur simulateur; tous les dix ont fait des erreurs à l'atterrissage et l'un d'entre eux est passé complètement à côté de la piste. »³

Deux semaines plus tard, le Dr John Morgan de la *City University of New York Medical School* disait au sujet de cette même étude :

« Un scientifique californien du nom de Jerome Yesevage en est l'auteur. C'est une étude qui remonte je crois au début des années 80 et qui avait à l'époque attiré l'attention. (...) L'étude du Pr Yesevage n'était régie par aucun paramètre de contrôle. (...) Comme vous l'avez entendu, l'utilisation de la marijuana est difficile à contrôler. Lorsque le Pr Yesevage a reçu une subvention du gouvernement fédéral américain pour répéter l'étude mais en y ajoutant les paramètres de contrôle simples que j'avais préconisés, comme d'autres d'ailleurs, il n'a pas réussi à démontrer un quelconque effet de la marijuana après quatre heures dans un groupe témoin similaire. Par conséquent, je pense qu'en réalité, le fait de fumer de la marijuana a effectivement une incidence lors de tests conduits dans des simulateurs de

³ Dale Orban, sergent-détective, Service de police de Regina, pour l'Association canadienne des policiers et policières, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 28 mai 2001, fascicule no 3, page 47.

pilotage, et également, dans une certaine mesure, sur les réflexes au volant, pendant un maximum de trois à quatre heures après le fait, mais ces effets ne durent pas, en plus ils sont relativement faibles. »⁴

Référant ensuite aux travaux de Robbe que nous examinons plus en détail dans ce chapitre, le professeur Morgan ajoutait :

« Un scientifique hollandais qui, pendant plusieurs années, a fait des expériences sur la conduite automobile a constaté que les conducteurs qui fumaient de la marijuana avaient quelques difficultés à rester dans leur bande de circulation. C'est ce test qui est le plus révélateur. Si vous fumez de la marijuana, vous aurez tendance à zigzaguer un peu plus que quelqu'un qui est tout à fait sobre. C'est important certes, même si aucune étude n'a démontré que ce zigzagage avait une influence significative sur les facultés du conducteur.

Le scientifique hollandais en question a ajouté dans son rapport que ce phénomène (...) était relativement le même que chez les conducteurs qui avaient consommé de l'alcool en petites quantités, qui avaient pris de la benzodiazépine en petites quantités, ou encore des antihistaminiques à faibles doses. »⁵

Or, le même jour, le professeur Kalant, de l'Université de Toronto, répondait ce qui suit :

« Le Dr Morgan a parlé de certaines études expérimentales ce matin. Un certain nombre d'études, recensées par le Dr Smiley dans le rapport du Comité sur les effets du cannabis sur la santé de l'Organisation mondiale de la santé démontrent un certain degré d'entente sur ce que sont les principaux effets sur la conduite automobile. Comme le Dr Morgan l'a dit, le conducteur a du mal à rester dans sa voie. Il ne manipule pas le volant avec autant de précision. Le temps de démarrage et le temps de freinage ralentissent. La recherche à vue est réduite. Autrement dit, lorsqu'on conduit, on doit être à l'affût des sources de danger des deux côtés et pas seulement devant soi. On note une baisse de la surveillance et une moins grande reconnaissance des signaux de danger. Les effets sont synergiques avec ceux de l'alcool. La seule chose favorable à propos du cannabis par rapport à l'alcool, c'est que les fumeurs de cannabis sont moins agressifs que les buveurs, de sorte qu'ils risquent moins de doubler dangereusement ou de faire de la vitesse. Il reste néanmoins que la capacité de conduite est altérée non seulement par une moins bonne direction mais aussi par une moins grande vigilance face à l'imprévu et aux sources de danger.

Je ne vais pas parler des statistiques sur le terrain concernant le rôle du cannabis dans les accidents de la route. Toutefois, je voudrais dire qu'un certain nombre d'études ont démontré des signes de la présence du cannabis dans le sang et l'urine de gens arrêtés pour conduite avec facultés affaiblies en l'absence d'alcool. »⁶

⁴ Dr John Morgan, professeur à la City University of New York Medical School, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule no 4, page 40-41.

⁵ Ibid.

⁶ Dr Harold Kalant, professeur émérite à l'Université de Toronto, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule 4, page 75.

Comme on le voit, et comme c'était le cas pour les effets et conséquences sur la santé des usagers, les avis divergent sur l'interprétation des études et leur signification quant aux effets spécifiques de la marijuana sur la conduite de véhicules.

Ce chapitre se divise en trois sections. La première examine les modes de dépistage de la présence de cannabinoïdes dans l'organisme. La seconde analyse les études sur la prévalence connue de conduite sous l'influence de véhicules, hors contexte accidentel et en contexte accidentel. Enfin la troisième résume l'état des connaissances sur les effets du cannabis sur la conduite de véhicules à partir d'études *in situ* ou en laboratoire. Comme pour les autres chapitres, le Comité dégagera ensuite ses propres conclusions.

MODES DE DÉPISTAGE

On connaît cinq milieux de dépistage de la présence de cannabinoïdes dans l'organisme : le sang, l'urine, la salive, les cheveux et la sueur.

Le sang est le milieu le plus approprié pour détecter la consommation récente de cannabis, puisque seule l'analyse du sang permet de distinguer entre les principes actifs du cannabis et les métabolites dépourvus d'effets psychoactifs. Toutefois, comme nous l'avons déjà vu, les concentrations de Δ^9 THC dans le sang atteignent un pic 9 minutes après la consommation de la cigarette, après 10 minutes il n'en reste que les deux tiers, 5 à 10 % au bout d'une heure et après deux heures, il sera à la limite de la détection. Il s'ensuit que toutes les méthodes ne sont pas appropriées pour le dépistage en raison de la forte possibilité de produire des faux négatifs et des faux positifs. La méthode la plus fiable, la chromatographie en phase gazeuse avec détection par spectrométrie de masse a une excellente sensibilité et permet également d'estimer le temps écoulé entre le moment de la dernière consommation et la prise de sang.

L'on a vu au chapitre 7 qu'il y a une relation dose-effet : 25 bouffées affectent les facultés cognitives de façon plus nette que 10 bouffées et 10 que 4. Mais il existe peu de données sur la relation entre la concentration et les effets sur la personne et la capacité notamment à répondre à la question centrale en matière de sécurité routière : à partir de quelle concentration peut-on considérer que les facultés étaient réduites ? En France, le seuil de positivité du Δ^9 THC a été fixé à 1 ng/ml⁷ pour les conducteurs impliqués dans des accidents mortels. Un autre auteur a proposé une formule établissant un rapport entre le Δ^9 THC, le 11-OH Δ^9 THC et le Δ^9 THC -COOH pour déterminer un facteur d'influence du cannabis avec un seuil de positivité de 10 ng/ml. Une concentration égale de Δ^9 THC et de COOH suggérerait une consommation remontant à environ 30 minutes et donc une forte probabilité d'effets

⁷ Dans ce chapitre, ng signifie nanogramme (soit un milliardième de gramme) et µg signifie microgramme (soit 1 millionième de gramme).

psychoactifs tandis qu'une concentration plus élevée de COOH que de Δ^9 THC suggère que la consommation remonterait à plus de 40 minutes. Cependant, une concentration de COOH de plus de 40 $\mu\text{g/l}$ indiquerait qu'il s'agit d'un consommateur chronique pour lequel il devient alors impossible de déterminer à quand remonterait la dernière consommation. D'autres travaux établissent qu'une concentration de 10 à 15 ng/ml dans le sang suggère une consommation récente sans que l'on puisse cependant établir à quand elle remonte.⁸

Les urines sont aussi un milieu de dépistage fréquemment utilisé et demeurent le milieu le plus approprié pour un dépistage rapide de la consommation. Par contre, les urines peuvent conserver des traces de consommation de cannabis pendant des semaines. De surcroît, ces traces sont celles du Δ^9 THC-COOH, un métabolite inactif. Par conséquent, leur intérêt tient principalement à des mesures épidémiologiques de la consommation de cannabis et ne contribue pas à la connaissance de la conduite avec facultés affaiblies.

Les niveaux de concentration du Δ^9 THC-COOH dans les urines sont très élevés : pour un usager d'un joint par jour elles se situent entre 50 et 500 ng/ml et peuvent atteindre plusieurs milliers de ng/ml chez les gros consommateurs, le seuil de positivité actuellement recommandé étant de 50 ng/ml d'urine.

La salive est un milieu très prometteur pour la sécurité routière parce que non intrusive et capable d'indiquer avec une certaine précision une consommation récente. La présence de Δ^9 THC dans la salive est essentiellement due au phénomène de séquestration bucco-dentaire lors de l'inhalation. Les concentrations y sont très élevées dans les minutes suivant l'absorption, variant entre 50 et 1 000 ng/ml, mais déclinent ensuite très rapidement dans les heures qui suivent, restant détectables pendant 4 à 6 heures en moyenne. Le projet européen ROSITA a comparé la fiabilité des prélèvements dans les urines, la sueur et la salive par rapport au sang. La salive est de loin le milieu le plus fiable, démontrant une corrélation exacte dans 91 % des cas. Toutefois, son faible niveau de concentration pendant la majeure partie de la durée des effets psychoactifs signifie qu'elle exige une méthode analytique sensible. Il n'existe malheureusement pas encore d'outil rapide de détection suffisamment performant et fiable en situation de conduite. Ainsi, les outils de détection en situation de conduite n'identifiaient correctement que 18 à 25 % des cas et produisaient beaucoup de faux négatifs.⁹

La sueur est généralement reconnue comme un mauvais milieu de détection, notamment en raison de la persistance du Δ^9 THC dans ce milieu, en même temps qu'il est excrété dans la sueur en faible quantité.

⁸ INSERM (2001), *op. cit.*, : pages 152-153.

⁹ Ramaekers, J.G. et coll., (2002) « Performance impairment and risk of motor vehicle crashes after cannabis use » in Pelc, I. (éd.) *International Scientific Conference on Cannabis*, Bruxelles, page : 81.

Enfin, les cheveux sont un milieu particulièrement intéressant puisqu'il s'y retrouve une quantité significative de Δ^9 THC qui permet d'établir la chronicité et le niveau (faible, moyen, élevé) de consommation. Toutefois, les concentrations sont de quelques ng par mg de cheveux, ce qui exige des analyses très performantes.

Le tableau suivant, tiré du rapport de l'INSERM, résume les principales caractéristiques des divers milieux biologiques de dépistage ; nous y avons ajouté, lorsque disponible, le seuil de détection retenu.

Principales caractéristiques des milieux biologiques de dépistage					
	Cannabinoides majoritaires	Délai maximum de détection	Domaine d'intérêt	Méthodologies disponibles	Seuil de positivité
Urines	THC-COOH (inactif)	Consommation occasionnelle : 2 à 7 jours Consommation régulière : 7 à 21 jours	Dépistage d'une consommation	Oui ; nombreux tests rapides	50ng de Δ^9 THC-COOH par ml
Salive	THC (actif)	2 à 10 heures	Dépistage d'une consommation récente	Non, pas de tests rapides	non déterminé
Sueur	THC	Très variable	Peu d'intérêt	Non, pas de tests rapides	inutile
Cheveux	THC	Infini	Révélation et suivi d'un usager régulier	Oui ; CPG-SM	non déterminé
Sang	THC 11-OH THC THC-COOH	2 à 10 heures	Confirmation, identification, dosage	Oui ; CPG-SM	1ng/ml (France)

Dans tous les cas, la manipulation et le transport des échantillons ainsi que les dosages toxicologiques sont essentiels à la qualité des analyses.

Par ailleurs, on constate qu'il existe encore beaucoup d'incertitudes sur les seuils permettant d'affirmer que la présence de Δ^9 THC affectait les facultés du conducteur. De surcroît, il n'existe pas encore de test de dépistage rapide fiable permettant d'identifier une consommation récente (ce que les tests d'urines ne peuvent faire). Enfin, d'autres drogues que l'alcool, dont plusieurs médicaments prescrits, peuvent avoir un impact sur la conduite de véhicules. C'est pourquoi plusieurs auteurs, et certains témoins, nous ont suggéré que le Canada devrait adopter le programme de classification et d'évaluation des drogues (DEC) et reconnaître les policiers formés à la reconnaissance des drogues (*Drug Recognition Expert*). Cette pratique est maintenant en

place dans la plupart des États américains (au moins 34 de même que le District de Columbia), en Colombie-Britannique, en Australie, en Norvège et en Suède.

Le scénario typique de conduite sous l'influence de substance psychoactives autres que l'alcool est le suivant : un véhicule attire l'attention du policier ; celui-ci immobilise le véhicule et interroge le conducteur ; s'il a des motifs suffisants de croire que le conducteur est intoxiqué, il lui fait passer un test d'alcoolémie ; toutefois, lorsque ce test donne un résultat inférieur à la limite légale, le policier peut ne pas être convaincu que le conducteur est en état de conduire, mais comment le démontrer ? Auparavant, il était le plus souvent obligé de le relâcher. Comme nous venons de le voir, il n'existe pas, en matière de drogues et de médicaments, d'équivalent au test d'alcoolémie et, en matière de cannabis notamment, des traces dans les urines n'établissent nullement que la consommation est récente. C'est dans ce contexte que les policiers du service de police de la Ville de Los Angeles ont développé, au début des années 1980, le *Drug Recognition Expert System* (DRE). Ces policiers reçoivent une formation spécifique sur la détection de la conduite sous l'influence de substances psychoactives et l'emploi du DEC.

Ce système permet au policier qui a des raisons de croire que le conducteur est intoxiqué de faire appel à un officier spécialement formé à la reconnaissance des drogues. Celui-ci procédera alors à l'évaluation du conducteur à partir d'un ensemble systématique et rigoureux de facteurs reconnus comme signalant la présence de drogues. Le processus inclut douze étapes :

- Test d'alcoolémie : Cet examen aura été fait au préalable par le policier qui a procédé à l'interpellation du véhicule. L'agent formé à la reconnaissance des drogues ne sera appelé que lorsque le test est négatif ;
- Interrogation du policier qui a procédé à l'interpellation : L'agent pose une série de questions conventionnelles au policier : dans quelle condition il a trouvé le suspect, ce qu'il avait observé, s'il a trouvé des drogues dans le véhicule, les déclarations du suspect, etc. ;
- Examen préliminaire (premier des trois mesures du rythme cardiaque) : Il s'agit ici de déterminer s'il y a des motifs suffisants de soupçonner la présence de drogues, et donc d'éliminer la possibilité qu'il s'agisse d'une condition médicale. L'agent observe l'état général du suspect, l'interroge sur sa condition de santé, procède à un examen des pupilles et du regard, et prend la première des trois mesures du rythme cardiaque. S'il estime qu'il n'y a aucun signe, le suspect sera relâché. S'il s'agit d'une condition d'ordre médical, il fera demande d'une évaluation médicale. Mais s'il pense qu'il s'agit de drogues, il poursuit alors l'examen ;
- Examen des yeux : L'agent procède à trois examens : un examen du regard vertical, du regard horizontal, et de la convergence. Il semble qu'aucune drogue ne soit capable d'entraîner un mouvement involontaire sautillant des pupilles sur l'axe vertical sans d'abord l'avoir provoqué sur l'axe horizontal. Aussi, s'il n'y a qu'un tremblement vertical, il s'agit probablement d'une

condition médicale (par exemple des lésions cérébrales). S'il y a tremblement horizontal, il est probable qu'il s'agit de drogues. Pour constater le tremblement horizontal, l'agent promène un stylo ou un autre objet sur un plan horizontal devant les yeux du suspect. Pour le tremblement vertical, il le promène de haut en bas. Enfin, certaines drogues empêchant les yeux de loucher, l'agent procédera à un test de convergence en plaçant le stylo ou l'objet sur le nez de la personne et lui demandant de le regarder ;

- Tests d'attention divisée : tâches incluant des tests d'équilibre, de marche, de se tenir sur une jambe et de porter son doigt au nez ;
- Examen des signes vitaux : seconde des trois mesures du rythme cardiaque, de la pression et de la température du corps ;
- Examen des pupilles sous quatre conditions différentes : lumière de la pièce, noirceur, lumière indirecte et lumière directe ;
- Tonus musculaire : mouvements des bras ;
- Examen de sites possibles d'injection ;
- Interrogation sur la consommation de drogues et les habitudes de vie ;
- Opinion : sur la base de l'ensemble de ces observations, l'agent se forme une opinion qui doit reposer sur un degré raisonnable de certitude ;
- Examen toxicologique : cet examen vise à corroborer l'analyse faite par l'agent. La décision de poursuite ne sera prise que sur réception des analyses.

Ce système a fait l'objet d'une standardisation au début des années 1980 avec le concours de l'administration nationale de la circulation routière aux États-Unis. Il a d'abord été validé dans une étude en laboratoire.¹⁰ Dans cette étude, quatre agents formés à la reconnaissance des drogues ont évalué des sujets qui recevaient soit un placebo soit une dose de drogue. Ni les sujets, ni les agents ne savaient qui avait reçu la drogue. Dans 95 % des cas, les agents ont identifié correctement les sujets qui n'avaient pas reçu de drogue. Dans 97 % des cas, ils ont identifié correctement les sujets qui avaient reçu de drogues et dans 98,7 % des cas ils ont pu déterminer quels sujets étaient sous l'influence de drogue.

Une étude en situation réelle a ensuite été menée en 1985, toujours avec le concours de l'administration de la circulation routière.¹¹ Dans cette étude, des échantillons de sang de 173 conducteurs arrêtés pour conduite sous l'influence de drogues ont été analysés par un laboratoire indépendant. Cette étude a démontré que les analyses des agents formés à la reconnaissance avaient prédit correctement dans 94 % des cas la présence de drogues autres que l'alcool. Dans 79 % des cas, les

¹⁰ Bigelow, G.E. (1985) *Identifying types of drug intoxication laboratory evaluation of a subject procedure*. Cité dans Sandler, D. (2000) « Expert and Opinion Testimony of Law Enforcement Officers Regarding Identification of Drug Impaired Drivers. » *University of Hawai'i Law Review* 23 (1) : 150-181.

¹¹ Compton, P.R. (1986) *Field Evaluation of the Los Angeles Police Department Drugs Detection Procedure*. Cité dans Sandler, D., *op. cit.*, page : 151.

analyses des agents identifiant la présence d'une drogue en particulier s'étaient révélées justes.

L'étude la plus complète a été menée en 1994 en Arizona. Dans cette étude, les dossiers de plus de 500 personnes arrêtées pour conduite sous l'influence de drogues ont été analysés et des analyses toxicologiques menées. L'étude a démontré que les analyses toxicologiques ont corroboré les conclusions des agents dans 83,5 % des cas. Des études semblables menées dans d'autres états ont donné des résultats comparables : 81,3 % au Texas, 84,5 % au Minnesota, 88,2 % en Californie, 88,2 % à Hawaï et 88 % en Oregon.

En ce qui concerne spécifiquement le cannabis, les indicateurs attendus dans ce système sont généralement les suivants : pas de tremblement horizontal ni vertical mais non-convergence du regard, pupilles dilatées, pouls accéléré et tension élevée.

En somme, tenant compte des limites à la détection sur site de l'influence du cannabis et des résultats de ces études, **il semble que l'adoption du DEC et la formation des policiers à la reconnaissance de la présence de drogues serait hautement souhaitable.**

DONNÉES ÉPIDÉMIOLOGIQUES

Selon certains témoins que nous avons entendus, la proportion de personnes conduisant avec facultés affaiblies et qui sont sous l'influence du cannabis dépasserait les 40 %. D'autres ont précisé qu'environ 12 % des accidents avec blessés pouvaient être attribués à la consommation de cannabis. Que révèlent les études ?

Les données sur la fréquence de conduite sous influence de cannabis (seul ou avec d'autres substances) sont, pour des raisons évidentes, difficiles à obtenir. Premièrement, pour les conducteurs accidentés, un test d'alcoolémie positif signifie la plupart du temps qu'aucune autre mesure ne sera faite, le niveau d'alcool dans le sang supérieur à la limite légale suffisant pour entreprendre des poursuites légales. Ensuite, les moyens de détection de la présence de THC sont intrusifs (sang, urine) contrairement à la détection éthylique, et posent donc des problèmes juridiques et éthiques spécifiques. D'autres mesures, tels les prélèvements de salive, ne permettent pas, pour le moment, un enregistrement sur détection à partir de sites routiers. Enfin, lors d'études sur l'ensemble des conducteurs, le consentement des conducteurs est essentiel au prélèvement sanguin ou urinaire, limitant ainsi la généralisabilité des résultats. Néanmoins, un certain nombre d'études ont été menées ces dernières années dont nous résumons les grandes lignes.

Études hors contexte accidentel

Deux types d'études ont été menées : des enquêtes sur l'ensemble des conducteurs pris au hasard dans le flot routier à divers moments de la journée et de la semaine, et des études sur présomption de conduite sous influence à l'occasion de contrôles policiers. Le tableau suivant, tiré de l'expertise collective de l'INSERM, résume ces données.

Détection et prévalence du cannabis en Europe et au Québec hors contexte accidentel ¹²				
Pays / Référence	Population	Méthode de détection	Echantillon	Prévalence (%)
Hors présomption de conduite sous influence de substances psychoactives				
Allemagne, Kruger et coll., 1995	Ensemble des conducteurs	Dépistage : FPIA salive Confirmation : CG/SM salive	2 234 (sur 3 027)	0,6
Pays-Bas, Mathijssen, 1998	Conducteurs les nuits de week-end	Dépistage : test salive, sueur et urine simultanément	293 (sur 402)	5
Italie, Zancanner et coll., 1995	Conducteurs les nuits de week-end	Dépistage clinique, vérifi- cation clinique et toxicolo- gique (sang, urine)	1 237	1,5
Canada	Conducteurs sur route	Urine	2 281	5
Dussault et coll, 2000	(enquête représentative)	Salive	2 260	(en cours)
		Air expiré (alcool)	5 281	> 0,8 : 0,8
Avec présomption de conduite sous influence de substances psychoactives				
Norvège, Skurtveit et coll., 1996	Conducteurs	Dépistage : immuno-essai sang ; Confirmation : CG/SM sang	2 529	26
Danemark, Worm et Steentoft, 1996	Conducteurs	Dépistage : RIA sang Confirmation : CG/SM sang	317 221	10 17
Royaume-Uni, Écosse, Seymour et Oliver, 1999	Conducteurs	Dépistage : immuno-essai sang ; Confirmation CG/SM sang	640	26

Au total, on observe que les taux de détection de la présence de cannabis varient entre 1 % et 5 % hors présomption de conduite avec facultés affaiblies. Toutefois, les données manquantes, vraisemblablement pour refus de fournir un prélèvement, empêchent de tirer des conclusions claires. Quant aux études avec présomption de conduite sous l'influence de drogues, les résultats sont nettement plus élevés : entre 10 et 26 %. Ces résultats ne traduisent pas nécessairement une prévalence plus élevée

¹² Tableau reproduit de INSERM (2001), *op. cit.*, page 175.

de conduite sous l'influence de substances psychoactives, mais plutôt une plus grande vigilance des policiers. En effet, comme on le verra immédiatement, la prévalence de détection de cannabis lors d'accidents mortels n'est pas plus élevée en Norvège (7,5 %) que dans les autres pays.

Études en contexte accidentel

Le tableau suivant, adapté de l'INSERM, présente les résultats d'un certain nombre d'études récentes en Europe, en Amérique et en Australie.

Prévalence de la conduite sous influence (csi) en contexte accidentel ¹³				
Pays	Population	Méthode de détection	Echantillon	Prévalence cannabis (%)
Belgique Meulemans et coll, 1997	Accidents corporels (2 roues et voitures)	Dépistage : urine Confirmation : urine CG/SM et comparaison urine sang	1 879	6 (urine) 3,6 (sang)
Espagne Alvarez et coll, 1997	Tués dans des accidents et soupçonnés de csi	Dépistage : immuno-essai sang Confirmation : CG/SM sang	979	1,5 peu fiable
France, Mura et coll., 2001	Accidents corporels (groupe témoin : patients)	Sans dépistage Confirmation : CG/SM sang	420 (381)	11,2 (10,8)
France, Kintz et coll, 2000	Accidents corporels	Dépistage : urine Confirmation : CG/SM urine et sang, tests salive et sueur	198	13,6 (urine) 9,6 (sang)
Italie, Ferrara, 1990	Blessés Contrôle vendredi soir	Dépistage : EMIT urine	4 350 500	5,5
Norvège, Christophersen, 1995	Blessés, accidents non mortels	Dépistage : immuno-essai sang Confirmation : CG/SM sang	394	7,5
Royaume-Uni, Tunbridge, 2000	Accidents mortels (dont 516 conducteurs)	Dépistage : immuno-essai urine Confirmation : CG/SM sang	1 138 516	12 10
Australie, Longo, 2000	Blessés (accidents non mortels)	Dépistage : immuno-essai sang Confirmation : CG/SM sang	2 500	11
Canada, Cimbura, 1990	Tués		1 169	11
États-Unis, Logan, 1996	Tués		347	11

¹³ Adapté de INSERM (2001), *op. cit.*, pages 171 et 174.

Il est difficile de comparer les études entre pays puisque les méthodes de détection, même en contexte accidentel, varient largement d'un pays à l'autre. Soulignons aussi à nouveau que le fait de dépister du cannabis chez les conducteurs accidentés n'est pas nécessairement signe qu'il en était la cause. Non plus que l'absence d'un dépistage ne signifie qu'il n'y avait pas conduit sous l'influence de cannabis.

Trois de ces études sont particulièrement intéressantes. L'étude de Mura et coll. (2001) montre une différence significative selon l'âge des conducteurs : chez les 18-20 ans, le Δ^9 THC était présent chez 18,6 % des conducteurs, et dans 50 % des cas il était présent seul (sans alcool). Une étude antérieure de Mura (1999) avait démontré que le cannabis était particulièrement présent chez les jeunes conducteurs : de 35 % à 43 % chez les moins de 30 ans, avec une prévalence encore plus forte (43 %) chez les moins de 20 ans, tandis qu'au-delà de 35 ans la prévalence tombe à 3 %.¹⁴

L'étude de Kintz et coll (2000) est intéressante notamment parce qu'elle montre clairement qu'après l'alcool (13,6 %) le cannabis est le produit le plus présent chez les conducteurs accidentés (9,6 %). Cette étude révèle aussi que sur l'ensemble de l'échantillon, l'incidence du cannabis mesuré par prélèvement sanguin (9,6 %) se rapproche de l'incidence de la conduite sous l'influence de l'alcool (10,6 %).¹⁵

Enfin, l'étude de Longo est d'un intérêt particulier en raison de la taille de l'échantillon, de sa représentativité et de la distinction entre les analyses de Δ^9 THC et de Δ^9 THC-COOH. Cette étude a détecté la présence de cannabinoïdes chez 10,8 % des conducteurs : 8 % pour le Δ^9 THC-COOH seul et 2,8 % pour le Δ^9 THC-COOH et le Δ^9 THC ensemble, révélant ainsi un pourcentage plus faible de Δ^9 THC positifs que dans les autres études. Par ailleurs, comme dans les autres études, les sujets positifs au Δ^9 THC étaient plus jeunes et plutôt des hommes.

Plus près de nous, Mercer et Jeffery ont examiné les analyses toxicologiques des 227 conducteurs tués lors d'accidents de la circulation en Colombie-Britannique entre octobre 1990 et septembre 1991.¹⁶ Les prélèvements étaient faits à l'autopsie dans les 24 heures suivant le décès ce qui, selon les auteurs, peut indiquer une sous-estimation de la présence d'alcool ou de drogues. Sur les 227 tués, 186 (43 %) n'avaient ni alcool ni drogues, 83 (37 %) avaient seulement l'alcool, 23 (11 %) avaient alcool et drogues, et 21 étaient négatifs pour l'alcool et positifs pour les drogues. En ce qui concerne le cannabis, 29 tués (13 % ; 26 hommes et 3 femmes) étaient Δ^9 THC-COOH positifs, enregistrant en moyenne une concentration de 15,9 ng/ml. Parmi le groupe +alcool/+drogues, (23 sujets), 17 étaient positifs aux métabolites du THC et 8 d'entre eux étaient positifs au Δ^9 THC (13 %). Pour le groupe 0alcool/+drogues (21 sujets), 8 (tous des hommes) étaient positifs au Δ^9 THC -COOH dont 4 au Δ^9 THC. Même si

¹⁴ Voir INSERM, (2001), *op. cit.*, page 172.

¹⁵ *Ibid.*

¹⁶ Mercer, W.G. et W.K. Jeffery (1995) « Alcohol, Drugs and Impairment in Fatal Traffic Accidents in British Columbia » *Accid. Anal. And Prev.*, 27 (3) : 335-343.

les auteurs concluent que le $\Delta^9\text{THC}$ / $\Delta^9\text{THC-COOH}$ était présent dans 13 % des cas, soit une proportion comparable à la plupart des autres études, il faut observer que seuls 12 sujets tués étaient positifs au $\Delta^9\text{THC}$ avec ou sans alcool et 4 seulement sans alcool.

Finalement, une étude épidémiologique plus récente portait sur les 1158 cas d'accidents mortels (391) ou de cas de conduites sous l'influence de substances psychoactives lorsque le taux d'alcoolémie était inférieur à 0,1 (767) rapportés aux laboratoires de toxicologie pénale du Canada au 12 novembre 1994.¹⁷ Les substances les plus fréquentes étaient les benzodiazépines (590 cas), l'alcool (580), le cannabis (551), les stimulants (224), les opiacées (176) et les barbituriques (131). Pour le cannabis, on obtient le tableau suivant :

Présence de cannabis au Canada (1994)			
	Total	Avec alcool	Sans alcool
THC			
➤ conduite sous influence	181	129	52
➤ décès	198	98	100
THC-COOH			
➤ conduite sous influence	127	29	98
➤ décès	45	24	21

Au total, les cas où le $\Delta^9\text{THC}$ sans alcool était présent représentent 13 % du total, un pourcentage qui se rapproche de celui que l'on constate dans les autres études.

Sur l'ensemble de ces études, on constate que la présence de cannabis chez les conducteurs accidentés ou tués varie entre 3,6 % (confirmé par une analyse du sang) et 13 % (sans confirmation). Lorsqu'il y a confirmation pour la présence de $\Delta^9\text{THC}$ par rapport au $\Delta^9\text{THC-COOH}$, la présence du principe actif diminue de moitié. D'autre part, les jeunes hommes ont des risques beaucoup plus élevés que les autres conducteurs de tester positif. Ces conclusions sont aussi largement partagées par d'autres auteurs.¹⁸

¹⁷ Jeffery, W.K. et coll. (1996) « The involvement of drugs in driving in Canada : An update to 1994. » *Can. Soc. Forens. Sci. J.*, 29 (2) pages 93-98.

¹⁸ Notamment le rapport de l'INSERM (2001), *op. cit.* ; Ramaekers, J.G. et coll., (2002) « Performance impairment and risk of motor vehicle crashes after cannabis use » in Pelc, I. (ed.) *International Scientific Conference on Cannabis*, Bruxelles.

Enquêtes épidémiologiques auprès des jeunes

Certaines enquêtes épidémiologiques menées auprès des jeunes en milieu scolaire ont commencé au cours des dernières années à leur poser des questions sur la fréquence de conduite sous l'influence de substances psychoactives, l'alcool et le cannabis en particulier. En Ontario, l'enquête OSDUS dont il a été question au chapitre 6, démontre que, pour 2002, 19,3 % des étudiants disaient avoir conduit un véhicule une heure ou moins après avoir consommé du cannabis au moins une fois au cours des douze derniers mois.¹⁹ De manière intéressante, 15 % disaient avoir conduit un véhicule moins d'une heure après avoir pris deux consommations ou plus d'alcool. Par ailleurs, l'enquête en milieu scolaire auprès des jeunes au Manitoba indique que près de 20 % d'entre eux ne voient rien de mal à consommer du cannabis et à conduire.²⁰

Notons enfin les données de l'étude de Cohen et Kaal auprès de consommateurs au long cours qui démontrait que pas moins de 42 % des répondants à Amsterdam et 74 % à San Francisco déclaraient avoir déjà conduit un véhicule sous l'influence du cannabis.²¹

Évaluation du risque

Tenant compte des difficultés de mener des études épidémiologiques fiables sur la conduite sous influence de cannabis, un certain nombre d'auteurs ont analysé la probabilité de responsabilité et le ratio de risque attaché à la consommation de cannabis. Ces études distinguent entre les conducteurs responsables et non responsables des accidents. Les premiers sont les sujets et les seconds le groupe témoin. L'on procède ensuite à des comparaisons de leur intoxication à diverses substances. Évidemment, la décision de classement selon l'axe responsable/non responsable peut dépendre de la perception qu'aura l'enquêteur de la présence ou non de substances psychoactives.

Le tableau suivant, reproduit du rapport produit par Ramaekers et coll. (2002) pour la conférence scientifique internationale sur le cannabis résume les résultats de diverses études.²² Signalons que la probabilité de responsabilité des conducteurs présentant des traces de cannabis (Δ^9 THC et/ou Δ^9 THC -COOH, mesuré dans le sang ou l'urine) est comparée à celle des conducteurs accidentés sans aucune substance (y compris l'alcool). Le ratio de risque des conducteurs sans substance est de 1,0 et sert de point de comparaison pour déterminer la signification statistique du changement

¹⁹ Adlaf, E.M. et A. Paglia (2001) *Drug Use among Ontario Students 1997-2001. Findings from the OSDUS*. Toronto : Centre for Addiction and Mental Health, page 134.

²⁰ Patten, D., et coll., (2000) *Substance Use among High School Students in Manitoba*. Winnipeg : Addictions Foundation of Manitoba.

²¹ Cohen, P.D.A. et H.L. Kaal (2001) *The Irrelevance of Drug Policy. Patterns and careers of experienced cannabis use in the populations of Amsterdam, San Francisco and Bremen*. Amsterdam : University of Amsterdam, CEDRO, page 68.

²² Ramaekers et coll. (2002), *op. cit.*, page 73.

observé du risque des conducteurs sous influence. Lorsque la valeur référence se situe au delà du niveau de confiance statistique de 95 %, il est permis de penser que cette drogue est à 95 % associée à un risque de responsabilité accru.

Ratio de culpabilité relatif à la conduite sous l'influence du cannabis				
Auteurs	Substances	ratio	Intervalle de confiance à 95%	Conducteurs coupables/non coupables
Terhune & Fell (1982), É.U.	Sans substances	1,0		94/179
	Alcool	5,4*	2,8 – 10,5	45/16
	THC	2,1	0,7 – 6,6	9/8
	Alcool/THC	-		-
Williams et coll. (1985), É.U.	Sans substances	1,0		55/23
	Alcool	5,0	2,1 – 12,2	120/10
	THC ou THC-COOH	0,2	0,2 – 1,5	10/9
	Alcool/THC ou THC-COOH	8,6*	3,1 – 26,9	123/6
Terhune et coll. (1992), É.U.	Sans substances	1,0		541/258
	Alcool	7,4*	5,1 – 10,7	587/38
	THC	0,7	0,2 – 1,8	11/8
	Alcool/THC	8,4*	2,1 – 72,1	35/2
Drummer (1994), Australie	Sans substances	1,0		392/140
	Alcool	5,5*	3,2 – 9,6	261/17
	THC-COOH	0,7	0,4 – 1,5	29/14
	Alcool/THC-COOH	5,3*	1,9 – 20,3	59/9
Hunter et coll. (1998), Australie	Sans substances	1,0		944/821
	Alcool	6,8*	4,3 – 11,1	173/22
	THC			
	➤ ≤ 1,0 ng/ml	0,35	0,3 – 2,1	2/5
	➤ 1,1 – 2,0 ng/ml	0,51	0,2 – 1,4	7/12
	➤ > 2 ng/ml	1,74	0,6 – 5,7	12/6
	THC-COOH			
	➤ 1 – 10 ng/ml	0,69	0,5 – 2,2	19/24
	➤ 11 – 20 ng/ml	1,04	0,4 – 2,1	18/15
	➤ 21 – 30 ng/ml	0,87	0,6 – 4,8	12/12
	➤ > 30 ng/ml	1,62	0,6 – 4,8	13/7
	Alcool/THC	11,5*	4,6 – 36,7	66/6
Lowenstein & Koziol-McLain (2001), É.U.	Sans substances	1,0		114/126
	Alcool	3,2	1,1 – 9,4	17/6
	THC-COOH	1,1	0,5 – 2,4	17/17
	Alcool/THC-COOH	3,5*	1,2 – 11,4	16/5

Ratio de culpabilité relatif à la conduite sous l'influence du cannabis				
Auteurs	Substances	ratio	Intervalle de confiance à 95%	Conducteurs coupables/non coupables
Drummer et coll. (2001) & Swann (2000), Australie	Sans substances	1,0		720/39
	Alcool	5,7*	4,1 – 8,2	49/5
	THC	3,0*	1,2 – 7,6	24/0
	THC > 5 ng/ml	6,4*	1,3 – 115,7	68/26
	THC-COOH	0,8	0 – 1,3	65/62
	Alcool/THC	19*	2,6 – 136,1	

On constate selon les résultats de ces études que le cannabis seul n'augmente pas la probabilité de culpabilité lors d'accident. Toutefois, il faut noter que la plupart des études ont utilisé une mesure de THC-COOH, le métabolite inactif qui peut rester dans les urines plusieurs jours. Lorsque les auteurs ont distingué le THC seulement, on observe un ratio de risque légèrement plus élevé, même s'il n'atteint pas le seuil de signification. De plus, plus la concentration de THC augmente, plus le ratio augmente, suggérant encore une fois une relation dose-effet. Par ailleurs, la combinaison cannabis alcool augmente significativement le risque. Sans pouvoir conclure définitivement, on peut remarquer certains signes que leurs effets sont en synergie et non seulement additifs.

Les études qui portent sur des conducteurs blessés (Terhune (1982) et Hunter (1998)) les ratios sont un peu plus élevés que dans les autres études portant sur les tués. Selon Bates et Blakely (1999), la réduction apparente du risque d'accident mortel tiendrait au fait que les conducteurs sous l'influence du cannabis conduisent de manière moins risquée, réduisant leur vitesse notamment.²³

En conclusion, nous sommes plutôt en accord avec l'INSERM sur ces études :

« Les résultats, en définitive, confirment l'importance du risque alcool, mais échouent généralement à démontrer un effet du cannabis seul sur le risque d'être responsable d'un accident mortel ou corporel grave. Les difficultés d'ordre méthodologique, qui rendent cette démonstration malaisée, contribuent pour une grande part à l'absence de résultats statistiquement indiscutables. Les analyses de responsabilité permettent néanmoins d'inférer que l'association entre l'alcool et le cannabis augmente le risque d'être responsable d'un accident par rapport à la consommation d'alcool seule ; ce résultat demande toutefois à être consolidé. Enfin, les données les plus récentes tendent à montrer que le risque d'être responsables augmente aux fortes concentrations de Δ^9 THC. Cela concernerait notamment la consommation de cannabis précédant immédiatement la conduite et peut-être les consommateurs chroniques. »²⁴

²³ Cité dans INSERM (2001), *op. cit.*, page 192.

²⁴ INSERM (2001), *op. cit.*, page 194.

ÉTUDES EXPÉRIMENTALES

Les études épidémiologiques indiquent une présence relativement importante de conduite sous l'influence du cannabis, entre 5% à 12 % des conducteurs, davantage chez les jeunes hommes. En même temps ces études et les analyses de risque de culpabilité n'arrivent pas à des conclusions claires sur le rôle du cannabis dans la conduite dangereuse. De là découle l'intérêt des études sur les effets du cannabis sur les facultés reliées à la conduite et sur la conduite elle-même. Les études sur les qualités psychomotrices et cognitives requises pour la conduite de véhicules ont mesuré des dimensions telles : la coordination motrice, le temps de réaction, l'attention, la poursuite visuelle, et le raisonnement déductif. Les études sur la conduite sont de deux types : sur simulateur et en situation réelle de conduite, sur piste, en ville ou sur autoroute. La plupart des études portent sur la consommation de doses uniques chez des usagers récréatifs. Elles utilisent des devis avec groupe témoin et des devis croisés, notamment avec placebo et comparaison avec l'alcool. Toutefois, elles sont limitées par le fait qu'elles mesurent principalement les effets aigus de doses uniques, de sorte qu'il est difficile de déterminer si des usagers plus expérimentés réagiraient de la même manière. Les sections qui suivent examinent ces deux types d'études.

Activités hors conduite

Dès 1985, Moskowitz publiait une synthèse remarquable des études sur les effets psychomoteurs et cognitifs du cannabis.²⁵ Dans cette synthèse, il examine la coordination motrice, le temps de réaction, le tracking, et les fonctions sensorielles. L'auteur observe ce qui suit :

- La coordination motrice, mesurée par la stabilité des mains, le balancement du corps et la précision des mouvements, était significativement affectée. Toutefois, la pertinence de ces résultats pour la conduite automobile est limitée, sauf dans les situations de conduite qui exigent une grande coordination, comme les situations d'urgence. Il faut aussi ajouter les limites de ces études quant au dosage et au nombre de sujets testés (entre 8 et 16) ;
- Le temps de réaction n'est pas significativement modifié : « *Il existe suffisamment d'études expérimentales sur le temps de réaction dans des situations simples et complexes pour établir que ni la vitesse de la détection initiale ni la vitesse de la réponse ne sont, en soi, réduites par la marijuana. Il semble plutôt que, lorsque la marijuana entraîne une augmentation du temps de réaction, ce soit parce qu'une dimension quelconque de la tâche d'analyse de l'information soit en jeu.* »²⁶ L'attention, plutôt que le temps de réaction, serait modulée par la consommation de marijuana ;

²⁵ Moskowitz, H., (1985) « Marijuana and Driving. » *Accid. Anal. Prev.*, 17 (4), 323-345.

²⁶ *Ibid.*, page 330.

- La ligne droite : cette dimension est particulièrement sensible aux effets de la marijuana, la vaste majorité des études démontrant des réductions significatives à la capacité de garder une ligne droite ou de corriger les déviations par rapport à la ligne ;
- Les fonctions sensorielles (auditives et visuelles) sont souvent modifiées, mais les études ne produisent pas de résultats précis sur la distinction entre les tâches simples et les tâches complexes.

Ramaekers et coll., (2002), rapportent une méta-analyse portant sur 87 études contrôlées en laboratoire sur les effets psychomoteurs du cannabis menée par Berghaus et coll. (1998). Ces auteurs ont trouvé que le nombre de fonctions psychomotrices reliées à la conduite (poursuite, temps de réaction, perception, coordination œil-main, équilibre corporel, détection de signaux et attention divisée et continue) affectées par le THC atteignait son maximum au cours de la première heure après consommation fumée, et 1 à 2 heures après consommation orale. Les maxima étaient comparables à ceux obtenus avec une concentration d'alcool équivalant à $> 0,05$ g/dl. Le nombre de fonctions affectées atteignait zéro après 3 à 4 heures, seules les doses plus élevées continuant d'avoir des effets. Les études recensées démontrent aussi que la concentration de THC dans le sang est fortement corrélée aux effets psychomoteurs : une concentration entre 14 ng/ml et 60 ng/ml affectait entre 70 % et 80 % des tâches.²⁷

Le tableau suivant résume ces données :

Détérioration des performances aux tests psychomoteurs selon la dose, le temps et le mode d'ingestion											
Dose de THC		Temps (en heures)									
		< 1		1-2		2-3		3-4		4-5	
		Tests (n)	% affectés	Tests (n)	% affectés	Tests (n)	% affectés	Tests (n)	% affectés	Tests (n)	% affectés
Fumé											
< 9mg		271	61 %	33	36 %	10	30 %	10	0 %	11	0 %
9 – 18 mg		193	53 %	48	38 %	8	38 %	6	0 %	2	0 %
≥ 18 mg		64	64 %	28	36 %	10	40 %	15	53 %	3	67 %
Total		528	58 %	109	37 %	28	36 %	31	26 %	16	13 %
Oral											
< 9mg		3	33 %	49	14 %	37	8 %	13	8 %	-	-
9 – 18 mg		3	0 %	41	39 %	45	18 %	17	18 %	-	-
≥ 18 mg		3	0 %	45	60 %	15	33 %	15	33 %	11	45 %
Total		9	11 %	135	37 %	97	20 %	45	20 %	11	45 %

²⁷ Ramaekers J.G. et coll., (2002) *op. cit.*, page 77.

Plus récemment, après recension des études menées au cours des dernières années, les rapports de l'INSERM et de la Conférence scientifique internationale sur le cannabis arrivent à des conclusions largement similaires : le cannabis affecte le temps de réaction avec choix, le contrôle de la trajectoire, l'attention partagée et l'attention continue, ainsi que les processus de mémoire, mais n'affecte pas significativement le temps de réaction simple, ni les fonctions visuelles et oculomotrices.

En activité de conduite

L'une des faiblesses des études en laboratoire tient à la difficulté de relier les tâches psychomotrices et cognitives directement aux activités de conduite. Plusieurs tests mesurés dans ces études sont courts et relativement simples et ne reflètent pas nécessairement les situations réelles. L'avantage des études sur simulateurs de conduite et en situation de conduite sont plus susceptibles de ressembler à la réalité.

La plupart des études contemporaines ont des caractéristiques semblables : les sujets ont leur permis de conduire depuis au moins trois ans. Ils sont souvent des usagers réguliers de cannabis. Les sujets reçoivent du cannabis ou un placebo dans une situation « double aveugle » selon un minutage très strict de façon à contrôler le niveau de THC transmis. Dans certains cas, les expérimentateurs incluent aussi des comparaisons avec l'alcool et un placebo d'alcool. Notons cependant qu'il est impossible de contrôler le niveau que les sujets inhalent et absorbent réellement. Le cannabis préparé par le *National Institute of Drug Abuse* (NIDA) aux États-Unis varie entre 1,75 % THC pour les doses faibles, 2,67 % pour les doses moyennes et 3,95 % pour les doses fortes. Converti en µg/kg de poids, les doses correspondent à 100, 200 et 300 µg/kg, la dose forte recherchée par les usagers réguliers correspondant généralement à 308 µg/kg. Les sujets sont familiarisés avec l'équipement utilisé, les tâches à effectuer, et sont accompagnés par des moniteurs lors des études sur route. Les mesures portent sur le contrôle de la position latérale par rapport à la voie, le contrôle de la position longitudinale (distance) par rapport au véhicule qui précède, la prise de décision en situation d'urgence, le style de conduite et la prise de risques.

Le tableau qui suit, adapté de l'INSERM, résume certaines des études les plus récentes.

Effets du cannabis sur la conduite automobile ²⁸				
Milieu / Référence	Sujet / Dose / Protocole	Tâches	Mesures	Résultats
Simulateur				
Liguori et coll., 1998	10 usagers Placebo Cigarette 1,77 % THC fumée en 5 mn Cigarette 3,95 % THC fumée en 5 mn Test : 2 mn après Durée : 1 heure	Éviter en freinant une barrière apparue soudainement (55 à 60mph)	Temps total de freinage	? faiblement significatif à 1,77 THC, légèrement plus à 3,95
		Jugement : maintenir une vitesse de 30mph sur une voie balisée et choisir la voie la plus large à embranchement	Temps de latence pour lâcher l'accélérateur et appuyer sur le frein Vitesse moyenne Nombre de cônes renversés Nombre de choix réussis	pas de différence Pas d'effet
Sexton et coll., 2000	15 usagers Placebo Herbe, dose faible 1,77 % THC	Section d'autoroute avec véhicule déboitant devant	Temps de réaction moyen	? à faible dose (forte variabilité à forte dose : ns)
	Dose forte: 2,67 % THC 1 cigarette résine: 1,70 % THC	Section d'autoroute avec véhicule freinant devant	Temps de réaction moyen	? à faible dose (ns)
	Échantillon de sang et salive 10 mn après début	Section d'autoroute de 16,7 km	Vitesse maximum minimum et moyenne	? moyenne de 6mph à faible et forte dose
	Test 30 mn Durée : 25 mn	Virages à gauche, à droite	Écart-type de la déviation ligne parfaite	? variation à forte dose vs faible dose ou placebo
		Carrefour avec feux sur route à 2 fois 2 voies	Temps de réponse au passage à l'orange	? à forte dose
Sur route				
Robbe, 1998 étude no1 Portion fermée d'autoroute (cannabis)	24 usagers Placebo 100, 200 et 300 Test : 40 minutes et 1h40 après	Vitesse constante à 90km/h et contrôle de trajectoire sur 22km	Écart-type de la déviation latérale	? instabilité aux 3 doses
			Moyenne de la déviation latérale	pas d'effet
			Moyenne et écart-type de la vitesse	pas d'effet

²⁸ Tableau adapté de l'INSERM (2001), *op. cit.*, pages : 183-184.

Effets du cannabis sur la conduite automobile²⁸				
Milieu / Référence	Sujet / Dose / Protocole	Tâches	Mesures	Résultats
Étude no2 Trafic normal sur autoroute (cannabis)	16 usagers mêmes doses qu'étude 1	Contrôle de trajectoire (id) 64km, 50 mn	Mêmes mesures	mêmes effets
	Test : 45 mn après	Suivi de véhicule à 50m à vitesse variable (entre 80 et 100km/h) sur 16 km, 15 mn	Temps moyen de réaction Moyenne et écart-type des distances	? ns Distance allongée de 8, 6 et 2 m pour 100, 200 et 300 THC
Étude no3 Conduite en ville (cannabis)	16 usagers Placebo 100	Parcours en ville de 17,5 km Trafic dense, moyen ou léger	Observations externes Observations internes : maîtrise, manœuvres, virages...	Pas de modification significative Pas d'effet
	Test : 30 mn après			
Étude no3 Conduite en ville (alcool)	16 usagers Placebo Alcoolémie : 0,5 g/l	Idem	Observations externes Observations internes : maîtrise, manœuvres, virages...	Pas de modification significative Alcool 0,34 g/l modifie maîtrise et manœuvres
Robbe, 1998 Conduite sur autoroute (cannabis et alcool)	18 usagers THC : 100, 200 Alcool : 0,4 g/l Traitements : Alcool 0 + THC 0 Alcool) + THC 100 Alcool 0 + THC 200 Alcool 0,4 + THC 0 Alcool 0,4 + THC 100 Alcool 04 + THC 200 Alcool puis cannabis 60 mn après Tests entre 21 h et 23h15	Trajectoire: vitesse à 100km et position latérale constante Suivi : suivre un véhicule à 50 m dont vitesse varie de \pm 15km/h toutes les 5mn	Écart-type de la déviation latérale Temps de réaction	? variabilité de trajectoire ; faible alcool seul, THC 100 seul ; Modérée : THC 200 Forte : alcool 0,4 et THC aux deux doses ? temps de réaction pour alcool 0,4 et THC 200
		Conduite avec trafic	Moyenne et écart-type des distances	? variabilité de l'interdistance dans tous les cas
Lamers et Ramaeckers, 2000 Conduite en ville (cannabis et	16 usagers THC 100 Alcool 0,5 g/l 4 traitements :	Conduite en ville 15 km	Fréquence des mouvements appropriés des yeux	Pas d'effet avec alcool seul ou cannabis seul

Effets du cannabis sur la conduite automobile ²⁹				
Milieu / Référence	Sujet / Dose / Protocole	Tâches	Mesures	Résultats
alcool)	Alcool 0 + THC 0 Alcool 0,5 + THC 0 Alcool 0 + THC 100 Alcool 0,5 + THC 100 Tests : 15 mn après Durée : 45 mn	Contrôle de la recherche visuelle	Qualité de conduite	? performances si alcool + cannabis Pas d'effet

Il est intéressant de se souvenir qu'une des premières études sur route avait été menée pour la Commission Le Dain.²⁹ Dans cette étude sur une piste en circuit fermé, 16 sujets recevaient chacun les 4 traitements suivants : placebo, marijuana 21 et marijuana 88 µg/kg THC et une dose d'alcool équivalant à BAC 0,07. Les tests étaient menés immédiatement après consommation et 3 heures après. Les sujets devaient compléter 6 tours de piste (1,8 km) avec manœuvres au ralenti en marche avant et en marche arrière, maintenir une trajectoire et contourner des cônes. L'alcool et la dose élevée de marijuana diminuaient les performances des conducteurs lors des tests immédiatement après consommation. À dose de cannabis élevée, les conducteurs maintenaient une vitesse réduite. Au second test, les différences s'estompaient.

Lorsqu'on compare les résultats de cette étude à celles qui ont été menées plus récemment avec des méthodes beaucoup plus sophistiquées, on constate que les résultats sont remarquablement similaires.³⁰ Ainsi l'on observe ce qui suit :

- Contrôle latéral : c'est la variable la plus sensible aux effets du THC mais les effets sont variables, notamment selon la dose et le temps ; seules les doses fortes affectent significativement le contrôle latéral du véhicule. Comparativement, l'alcool affecte davantage le contrôle latéral du véhicule et la vitesse (variables reliées) ;
- Contrôle de la vitesse : dans presque tous les cas, la consommation de cannabis diminue significativement la vitesse ;
- Prise de risques : en plus d'une diminution de la vitesse, on constate généralement une augmentation de la distance entre les véhicules chez les consommateurs de marijuana, une moins grande tendance à dépasser ou à faire des manœuvres dangereuses ;

²⁹ Voir Hansteen, R.W, et coll., (1976) «Effects of cannabis and alcohol on automobile driving and psychomotor tracking.» *Annals of the New York Academy of Science*, 282, pages : 240-256.

³⁰ Voir notamment la recension des études et la discussion dans Smiley, A., (1999) «Marijuana : On-Road and Driving Simulator Studies» in Kalant, H. et coll., (ed) *The Health Effects of Cannabis*. Toronto : Addiction Research Foundation, pages : 173 passim.

- Temps de décision: cette variable est particulièrement importante dans une situation de conduite réelle. En apparence, les résultats ne sont pas très cohérents. Par contre, Smiley suggère que le temps de réaction n'est pas affecté lorsque les sujets ont une indication qu'ils doivent répondre rapidement; par contre, lorsque les obstacles sont tout à fait imprévus, les sujets ayant consommé du cannabis sont moins performants ;
- Effets conjugués de l'alcool et du cannabis : lorsque les chercheurs ont vérifié les effets des deux substances, les effets conjugués du cannabis et de l'alcool étaient systématiquement plus importants que ceux de l'alcool seul et plus encore de ceux du cannabis seul.

Enfin, à faible dose les sujets ont l'impression que leur conduite est moins bonne qu'elle ne l'est selon les observateurs, ce qui n'est pas nécessairement le cas à doses plus élevées où les perceptions des uns et des autres sont en accord.

CONCLUSIONS

Le Comité est d'avis qu'il est vraisemblable que le cannabis rend les consommateurs plus prudents, notamment parce que, conscients de leurs déficiences, ils compensent par une réduction de la vitesse et par une moins grande prise de risques. Toutefois, en matière de conduite sous l'influence de cannabis, parce qu'il ne s'agit plus des conséquences sur les usagers eux-mêmes, mais des conséquences possibles de leur comportement sur d'autres personnes, le Comité est d'avis qu'il **convient d'opter pour la plus grande prudence**. Tenant compte de ce que nous avons vu dans ce chapitre, et malgré les limites méthodologiques dont souffrent les études menées sur le dépistage de la prévalence de conduite sous l'influence du cannabis, nous concluons comme suit :

Conclusions du chapitre 8	
Données épidémiologiques	<ul style="list-style-type: none"> ➤ Entre 5% et 12% des conducteurs pourraient conduire sous l'influence du cannabis ; ce pourcentage monte à plus de 20 % lorsqu'on isole les jeunes hommes de moins de 25 ans. ➤ Ce fait en soi ne signifie pas que les conducteurs sous l'influence de cannabis représentent un danger pour la sécurité routière. ➤ Une proportion non négligeable démontre la présence de cannabis et d'alcool simultanément.
Données sur les effets sur la conduite	<ul style="list-style-type: none"> ➤ Le cannabis seul, surtout à faible dose, a peu d'effets sur les facultés reliées à la conduite automobile. ➤ Le cannabis, surtout aux doses correspondant aux doses élevées recherchées par les usagers réguliers, affecte

Dépistage	<p>négativement le temps de décision et la trajectoire.</p> <ul style="list-style-type: none">➤ Le cannabis mène à un style de conduite plus prudent.➤ Les effets du cannabis conjugué à l'alcool sont plus importants que ceux de l'alcool seul. <p>➤ Malgré les progrès accomplis, il n'existe pour le moment aucun test rapide de dépistage en situation de conduite (roadside testing).</p> <p>➤ Le sang demeure le milieu le plus sûr pour détecter la présence des cannabinoïdes.</p> <p>➤ Les urines ne peuvent indiquer une consommation récente.</p> <p>➤ La salive est un milieu prometteur mais les tests rapides commerciaux ne sont pas encore fiables.</p> <p>➤ La méthode de reconnaissance visuelle par les policiers a démontré des résultats satisfaisants.</p>
Mener des études	<p>Il est essentiel de mener des études pour :</p> <ul style="list-style-type: none">➤ Développer un outil de dépistage rapide.➤ Mieux connaître les habitudes de conduite des consommateurs de cannabis.

CHAPITRE 9

APPLICATIONS THÉRAPEUTIQUES DU CANNABIS

La question des applications thérapeutiques du cannabis a connu, au cours des dernières années, un renouveau d'intérêt, au Canada notamment. En effet, suite à une décision de la Cour d'appel de l'Ontario invalidant les dispositions de la Loi sur les drogues relativement à l'usage médical du cannabis, le ministre fédéral de la Santé a adopté, en juillet 2001, une nouvelle réglementation permettant, sous certaines conditions, l'accès au cannabis à des personnes présentant des symptomatologies spécifiques. Plus tard cette même année, s'est tenue à La Haye aux Pays-Bas une conférence internationale sur le cannabis médical à laquelle participaient des délégations de plusieurs pays occidentaux, dont le Canada.¹ Plus tôt, en 1999, l'Académie américaine de médecine avait publié une synthèse des connaissances sur les applications thérapeutiques du cannabis.²

Pourtant, la communauté scientifique, médicale en particulier, est divisée quant à l'efficacité réelle du cannabis aux fins thérapeutiques. Certains n'hésitent pas à dire que la porte ouverte au cannabis médical serait en fait un pas vers la légalisation pure et simple du cannabis. En témoignent les deux citations suivantes, dont la première d'un ancien directeur du *National Institute on Drug Abuse* (NIDA) des USA :

[Traduction] « *C'est le poids politique des défenseurs de la légalisation du cannabis qui crée la motivation à mener des études sur la marijuana fumée. (...) Leur clameur insistante à l'effet que seule la marijuana fumée est acceptable comme "médicament", leur insistance à faire fumer des malades en public, s'expliquent par le fait qu'ils savent que cet acte légitimise l'usage de la marijuana en changeant la perception publique de la marijuana d'une drogue nocive à un médicament utile.* »³

[Traduction] « *Bien que plusieurs défenseurs de la marijuana médicale le fassent sur une base humanitaire et avec la ferme conviction que les bénéfices de la marijuana fumée ne sont pas disponibles*

¹ *International Conference on Medicinal Cannabis*. 22-23 novembre 2001, La Haye, Pays-Bas.

² Joy, J.E., Watson, S.J. & J.A. Benson (eds.) *Marijuana and Medicine : Assessing the Science Base*. Washington, DC., National Academy Press.

³ DuPont, R.L. (1999) «Examining the Debate on the Use of Medical Marijuana. » *Proceedings of the Association of American Physicians.*, volume 111, no 2, page 169.

autrement, un appui important provient des défenseurs d'une libéralisation des politiques sur les drogues et de la décriminalisation de l'usage. »⁴

Il est vrai que, comme nous l'a rappelé le professeur Mark Ware lors de son témoignage devant le comité, dans le contexte juridique et politique actuel, la capacité est limitée de mener des études et surtout de le faire sans être influencé par le climat passionné des débats sur le cannabis.

[Traduction] « Regardons les effets que nos politiques actuelles sur les drogues ont eus sur notre compréhension du cannabis. Toutes les données sur les effets du cannabis sur la santé ont été recueillies sous un paradigme prohibitionniste. Cela peut sembler évident, mais il s'agit d'une source importante de biais. Pour connaître les effets du cannabis sur la santé, une estimation de l'usage dans la population en santé est importante. (...) Or, les taux de réponse aux enquêtes sur l'usage de drogues illicites sont notoirement faibles. Cela réduit notre capacité à tirer des conclusions sur les effets du cannabis quand on ne sait pas qui en consomme. Il est essentiel d'estimer le niveau de biais et ses effets, et toute bonne recherche tentera toujours de réduire les biais. Toutefois, mon expérience d'analyse critique de la littérature sur les effets du cannabis sur la santé, m'a amené à constater que plusieurs études estiment les risques sans avoir intégré des mécanismes de contrôle appropriés sur les biais de sélection. (...) La question n'est donc plus de savoir "comment les politiques sur le cannabis ont affecté la santé ?" mais de savoir "comment les politiques sur le cannabis ont affecté notre compréhension des effets du cannabis sur la santé ?" »⁵

Il est vrai aussi que la question du cannabis médical nous interroge sur la conception même de la médecine moderne et ses liens avec l'industrie pharmacologique, puisque des recherches sur les cannabinoïdes ont déjà permis le développement de composés synthétiques de THC. Or, l'on sait que les industries pharmaceutiques ont joué un rôle important lors des négociations internationales menant à l'adoption des premières conventions internationales sur le contrôle des substances psychoactives.⁶ De même, la plante de cannabis elle-même, parce que non brevetable, ne présente aucun intérêt pour les grands groupes de recherche pharmaceutique.

Au delà de la « preuve » scientifique de l'efficacité du cannabis et de la possibilité pour les médecins de le prescrire avec un degré suffisant de confiance, de nombreuses personnes sont convaincues, à partir de leur expérience personnelle, que le cannabis contribue directement à l'amélioration de leur mieux-être tout en entraînant un minimum de conséquences négatives. C'est d'ailleurs ce qui a mené à la création des « clubs compassion », ces organismes qui distribuent de la marijuana à une clientèle de

⁴ Rosenthal, M.S. & H.D. Kleber (1999) « Making Sense of Medical Marijuana. » *Proceedings of the Association of American Physicians*, volume 111, no 2, page 159.

⁵ Dr Mark Ware, professeur adjoint de médecine familiale et d'anesthésie, Université McGill, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, 31 mai 2002.

⁶ Voir là dessus notamment l'étude de W.B. McAllistair, *Drug Diplomacy in the 20th Century*. Il en sera question plus loin au chapitre 19.

plus en plus importante. L'une des questions qui nous est alors posée est celle de savoir quel degré de preuve faut-il atteindre avant de laisser des personnes utiliser librement le cannabis pour soulager une condition médicale. Ou même s'il faut réfléchir en termes strictement médicaux en cette matière.

Nous avons vu, au chapitre 7, que les effets à long terme du cannabis, même pour une consommation régulière, sont restreints et que même les effets les plus graves tels les cancers du poumon n'ont pas encore été établis clairement. Nous avons aussi vu que les effets négatifs sur les fonctions cognitives d'une consommation prolongée se manifestent plutôt chez des personnes déjà vulnérables, soit en fonction de leur jeune âge au début de la consommation soit en fonction de leur condition personnelle (par exemples, des prédispositions psychotiques). Nous avons aussi vu que, même présumant une certaine tolérance et un certain niveau de dépendance psychologique, celles-ci sont mineures, les signes de sevrage légers et les traitements moins souvent nécessaires et longs que pour d'autres drogues. Dans une certaine mesure, il semble bien que ce soient les propriétés psychoactives du cannabis qui, associées pour les uns à un refus de socialité, pour les autres à une personnalité faible, pour les autres encore à un comportement immoral, rendent cette substance suspecte, aussi bien dans ses applications médicales que non médicales.

En ce sens, la question du cannabis médical n'est pas tant une question de légalisation par la petite porte de côté, qu'une interrogation ouverte sur les conceptions sous-jacentes que chacun se fait de cette « drogue ». Un cas de figure en quelque sorte privilégié pour explorer nos préconceptions et nos biais. Affirmer, comme nous l'avons fait aux chapitres 6 et 7, que les conséquences psychologiques, physiologiques, ou sociales, de la consommation de cannabis semblent, selon toute vraisemblance, relativement bénignes, ne dit rien des bénéfices thérapeutiques de cette plante. Pas plus que les applications médicales du pavot n'indiquent les torts individuels ou sociaux que peut entraîner l'héroïne. C'est un peu ce que nous rappelait le Dr Kalant :

« La séparation des méthodes de contrôle suivant qu'il s'agit d'un usage médical ou non médical est généralement bien comprise. L'héroïne et la cocaïne ont des usages médicaux limités mais reconnus. (...) Pourtant, personne ne soutient qu'étant donné l'utilisation limitée de ces drogues à des fins médicales on devrait en légaliser l'usage non médical. (...) Le cannabis est peut-être la seule exception où l'utilisation possible à des fins médicales est souvent utilisée pour justifier la légalisation de son usage à des fins non médicales par certains de ceux qui préconisent la légalisation du cannabis. Cela me semble tout à fait irrationnel. Il n'y a aucune raison logique pour justifier que la légalisation de l'usage médical d'une substance serve d'argument pour obtenir la légalisation ou l'interdiction de l'utilisation de la même substance à des fins médicales. »⁷

⁷ Dr Harold Kalant, professeur émérite à l'Université de Toronto, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule 4, pages 70-71.

Pourtant, comme le soulignait à nouveau le Dr Ware, « grâce aux cohortes massives de volontaires en santé qui ont consommé du cannabis au cours des quarante dernières années en Occident, la sécurité du cannabis a en fait été largement documentée. Le cannabis a en quelque sorte été l'objet de l'étude clinique de Phase I la plus extensive et la moins orthodoxe de toutes les drogues dans l'histoire. »⁸ Admettant que les protocoles de recherche pour admettre une substance à l'usage médical sont et doivent demeurer rigoureux, il n'y a pas de frontière étanche entre les deux domaines de recherche. C'est bien ce que démontrait en partie l'examen des études au chapitre 7 sur les effets et conséquences du cannabis. Surtout, l'approche inverse nous a semblé plus fréquente où, partant des effets néfastes présumés du cannabis sur la santé psychologique et physique, son utilité thérapeutique devient au moins suspecte. Nous en prendrons pour exemple la position de l'Association médicale canadienne.

Dans son témoignage devant le Comité, le Dr Haddad, président en exercice de l'Association a dit :

« Alors que nos connaissances sur tous les effets à long terme possibles des drogues sur la santé ne cessent d'évoluer, celles que nous possédons à ce sujet sont inquiétantes. Les risques pour la santé vont de certains effets aigus comme l'anxiété, la dysphorie ou la sensation d'être malade ou encore le déficit de la cognition, à des effets chroniques comme la bronchite, l'emphysème et le cancer. Les jeunes consommateurs canadiens ont en outre des problèmes pulmonaires comparables à ceux dus à la consommation de tabac quoique les effets soient beaucoup plus aigus et plus rapides. Les études indiquent que la consommation de deux ou trois cigarettes de cannabis par jour a les mêmes répercussions sur la santé que celle de 20 cigarettes ordinaires. Par conséquent, les effets potentiels à long terme de la consommation de cannabis pourraient être très graves.

C'est notamment en raison de ces préoccupations au sujet des conséquences de la consommation de cannabis que l'AMC s'oppose au règlement fédéral actuel sur l'accès médical à la marijuana. Dans la lettre qu'elle a adressée au ministre de la Santé, l'AMC a signalé que l'on ne possédait pas de renseignements plausibles sur les risques et les avantages de la consommation de la marijuana à des fins médicales. Au cours des discussions que nous avons eues au sujet du règlement fédéral sur la consommation de marijuana à des fins médicales, nous avons mis l'accent sur les préoccupations que l'on a au sujet de ses effets sur la santé et sur des études qui indiquent que la marijuana est une substance qui provoque une accoutumance et qui a des effets psychoactifs connus et que, consommée sous forme de cigarette, elle est particulièrement nocive.

Nous sommes arrivés à la conclusion que si les effets bénéfiques de l'usage médical de la marijuana ne sont pas encore connus, sa consommation comporte bel et bien des risques pour la santé. Par conséquent, il serait inapproprié que des médecins prescrivent de la marijuana à leurs patients ; c'est une prise de position qui a l'appui de l'Association médicale canadienne.

(...)

L'AMC craint que le présent débat concernant la décriminalisation et l'usage de la marijuana à des fins médicales ne légalise dans une certaine mesure sa consommation dans un simple but de détente. Il est important que le message que nous vous communiquons au sujet de la décriminalisation soit clair et bien

⁸ Dr Mark Ware, *loc. cit.*

compris. Celle-ci doit être liée à une stratégie nationale de sensibilisation et de prévention fondée non seulement sur la recherche mais aussi sur un traitement global et sur un contrôle du programme.

(...)

L'AMC estime que tout changement concernant la politique en matière de drogues illicites devrait être progressif. Comme pour toute autre question liée à la santé publique, l'éducation et la sensibilisation aux effets potentiellement nocifs associés à la consommation de cannabis et d'autres drogues illicites sont essentielles dans le cadre de la lutte contre la toxicomanie. »⁹

Si l'on arrivait à démontrer que les effets ne sont pas aussi nocifs qu'on le pense, cela changerait-il quoi que ce soit aux questions relatives aux applications thérapeutiques du cannabis ? Pourtant, les effets aigus identifiés par l'AMC sont certes possibles mais plutôt rares, et souvent le fait soit de prédispositions personnelles, soit du contexte, soit encore d'un arrivage particulier de cannabis. En fait, les principales réactions aiguës, celles que la plus large partie de la recherche documente, sont plaisantes et contribuent effectivement à la détente. Si l'on arrivait à convaincre l'Association médicale que le cannabis crée peu d'assuétude et de dépendance, et que même lorsque c'est le cas elles sont relativement bénignes, cela faciliterait-il la prescription médicale de cannabis ? Or non seulement le cannabis n'est-il que faiblement associé à la « toxicomanie », mais la notion même de toxicomanie, a fortiori entendue comme maladie, est loin de faire consensus dans la communauté scientifique.

En fait, la question est ailleurs. Et à deux endroits. Premièrement, la connaissance des effets potentiellement nocifs du cannabis ne dit rien des qualités de la plante comme médicament. Certes, la connaissance des effets secondaires des médicaments, incluant leur potentiel addictif, est essentielle à la pharmacopée. Mais ces substances doivent d'abord être établies comme médicaments, notamment au titre de leur efficacité et de leur fiabilité. Deuxièmement, tout se passe comme si la résistance devant l'utilisation thérapeutique du cannabis ne reposait pas tant sur l'absence de connaissances médicales *stricto sensu* – ce qui est le cas par ailleurs dans une certaine mesure comme nous le verrons plus loin dans ce chapitre – que sur l'association faite entre le cannabis comme drogue et la toxicomanie. Vue sous cet angle, la question est en effet vite résolue : conformément à l'adage médical « *first do no harm* », un médecin ne prescrira pas un remède dont les effets risqueraient d'entraîner une maladie au moins aussi grave que celle qu'il vise à soigner. Inscrit au registre des drogues illicites, prohibé selon certains en raison de ses effets nocifs, et risquant d'entraîner la toxicomanie, quels arguments péremptoires permettraient alors de « sauver » le cannabis médical ?

Pourtant, rien de cela ne devrait avoir d'importance pour le médecin, pour le scientifique. Il ne s'agit pas de défendre un quelconque régime de politique publique global sur le cannabis, voire sur l'ensemble des drogues illicites. Il ne s'agit pas de traduire un message symbolique sur « les drogues ». Il ne s'agit pas d'avoir peur que les

⁹ Dr Henry Haddad, président, Association médicale canadienne, témoignage devant le Comité spécial sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 mars 2002, fascicule 14, pages 52-53 et 54-55.

jeunes puissent consommer du cannabis s'il était admis comme médicament. La question, la seule question qui se pose au médecin ici, est de savoir si, dans quelle mesure, et dans quelles circonstances, le cannabis a une utilité thérapeutique. De dire si des personnes atteintes de certaines maladies peuvent en bénéficier et de se prononcer sur les effets secondaires nocifs par rapport aux bénéfices. Et dans l'affirmative, de réfléchir ensuite aux modalités par lesquelles les patients pourraient se le procurer. Mais on voit bien que la question est fortement colorée par le contexte dans lequel elle se pose. Ce qui est bien sûr inévitable ; à condition de le dire clairement et sans détour.

Le reste de ce chapitre survole l'histoire des utilisations thérapeutiques du cannabis puis l'état des connaissances contemporaines sur le cannabis et les cannabinoïdes synthétiques. Nous décrivons ensuite brièvement le fonctionnement des clubs compassion et autres organismes qui fournissent du cannabis à des fins thérapeutiques, ainsi que divers régimes de politiques publiques. En conclusion, nous émettons notre avis sur les applications médicales du cannabis. Nous examinerons dans un chapitre ultérieur la question du régime de politique publique qui serait le plus approprié eu égard au statut du cannabis à des fins médicinales.

ASPECTS HISTORIQUES

Il semble bien que les utilisations thérapeutiques potentielles du cannabis aient été connues aussi loin que l'on puisse remonter dans l'histoire. En fait, il est probable que ces applications aient été connues avant même l'exploitation de ses propriétés psychoactives.

L'histoire médicale du cannabis est intimement liée à ses propriétés analgésiques, comme le souligne Ethan Russo :

[Traduction] « *L'histoire du cannabis comme analgésique couvre au moins 4000 ans, incluant un siècle de médecine occidentale. (...) Les raisons tiennent des propriétés pharmacologiques remarquables de l'herbe, et les études scientifiques récentes démontrent les liens complexes que les cannabinoïdes possèdent avec notre biochimie interne. En fait, les cannabinoïdes forment un système parallèle au système opioïde endogène pour le contrôle de la douleur. De manière encore plus importante, le cannabis et ses contreparties synthétiques endogènes sont peut-être efficaces pour contrôler la douleur là où les opiacés et d'autres analgésiques échouent.* »¹⁰

Selon Russo, on a trouvé des documents écrits ou des traces ethnographiques de l'utilisation de cannabis à des fins médicales dans de nombreux pays. En Chine, un traité médical du II^e siècle rapporte qu'il était utilisé pour les anesthésies chirurgicales.

¹⁰ Russo, E.B. (2002) « The role of cannabis and cannabinoids in pain management. » in Weiner, R.S. (ed.) *Pain Management. A Practical Guide for Clinicians*. Boca Raton, London, New York, Washington : CRC Press.

En Inde, le cannabis fait partie des traitements pour les migraines et douleurs viscérales depuis environ 2000 à 1400 avant l'ère chrétienne. En Égypte, où la plupart des érudits pensaient que le cannabis ne s'était pas implanté, on aurait trouvé des preuves de son utilisation dans la médecine depuis les temps pharaoniques. On en a ainsi retrouvé des traces dans les tombes des pharaons Amenophis IV et Ramses II. Il aurait été utilisé notamment pour les glaucomes et pour les douleurs de l'accouchement. Le cannabis était administré par voie orale, rectale, vaginale, appliqué sur la peau ou dans les yeux, et fumé.

En Assyrie, Sumer et Arcadie, il aurait été utilisé tant pour ses effets analgésiques, pour les migraines et les douleurs menstruelles, que pour ses propriétés psychoactives. On en a aussi trouvé des traces en Palestine et en Israël, notamment pour les douleurs reliées à l'accouchement. Les Grecs et les Romains s'en servaient pour le contrôle de la douleur en général, spécifiquement pour la goutte et les rhumatismes. Dans le monde musulman, on mentionne des applications thérapeutiques depuis le IX^e siècle.

C'est vers le milieu du XVII^e siècle que la médecine occidentale aurait découvert les propriétés médicinales du cannabis. Un traité des plantes publié en 1640 au Royaume-Uni fait mention des usages du cannabis sous forme d'une pâte mélangeant le jus de la décoction avec d'autres ingrédients. En France, le traité du chanvre publié par Mercandier décrit diverses utilisations : séché et appliqué sous forme de cataplasme il diminuera les douleurs reliées aux tumeurs, bouilli et sous forme de cataplasme il aide à réduire les douleurs reliées aux rhumatismes, à la goutte et aux inflammations musculaires diverses, réduit en poudre et mélangé à du beurre, il diminue les douleurs reliées aux brûlures. Dans sa classification des plantes, Linnée reconnaît les propriétés médicales du cannabis pour réduire les douleurs.

L'utilisation médicale du cannabis s'est répandue au Royaume-Uni au milieu du XIX^e siècle quand la plante a été rapportée de l'Inde. Il n'est pas jusqu'au médecin personnel de la Reine Victoria, Russell Reynolds, qui ne l'ait utilisé : dans ce cas, il s'est servi d'extrait de cannabis pour traiter la dysménorrhée de son illustre patiente au cours de toute sa vie adulte. Il soulignait notamment, dans un traité écrit en 1868, que, contrairement aux opiacées, l'utilisation du cannabis aujourd'hui n'entraînait pas la misère de demain.¹¹

Des médecins et pharmaciens anglais, irlandais, français, puis américains, ont témoigné de diverses manières, entre 1890 et 1940, de l'utilité du cannabis sous diverses préparations, pour soulager la douleur. Un pharmacologue britannique a même, en 1899, réintroduit le fumage du cannabis, soulignant que le fait de le fumer est particulièrement utile si un effet immédiat est désiré.¹²

Le cannabis fait toujours partie de la pharmacopée, au moins informelle, de plusieurs pays du sud-est asiatique. Ainsi, cette description récente de son utilisation en Inde :

¹¹ Cité dans Russo, *op. cit.*, page 359.

¹² *Ibid.*, page 360.

[Traduction] « Le charas est la sécrétion résineuse sur les feuilles et les fleurs des plants (équivalent au baschich arabe) ; c'est le principe actif du chanvre. C'est un narcotique utile, particulièrement lorsque l'opium n'est pas conseillé. Il est très utile pour soigner les maux de tête dus à la malaria et aux menstruations, les migraines, les manies aiguës, la toux phthisique, l'asthme, l'anémie cérébrale, les vomissements nerveux, le tétanos, les convulsions, les désordres mentaux, le délire, la dysporée, et la fatigue nerveuse. Il est aussi utilisé comme anesthésique, dans les cas de dysménorrhée, pour stimuler l'appétit et comme aphrodisiaque, pour soulager l'eczéma, et divers autres types de douleurs, etc. »¹³

Il est aussi utilisé en Colombie, en Jamaïque et au Brésil notamment.

Il est évidemment tentant, tout épris de notre science moderne, de rejeter ces usages traditionnels dans les tiroirs des bonnes histoires de « médecines de bonne femme » - on excusera le terme – et autres recettes de charlatan. Pourtant, que le cannabis ait été utilisé depuis aussi longtemps pour les mêmes types de conditions, qu'il ait été parfois décrit avec autant de précision, qu'il ait franchi les cultures et les histoires, et que la médecine moderne fournisse des indications à l'effet que le cannabis pourrait effectivement être un adjuvant utile pour le traitement de la douleur chronique associée à diverses conditions médicales, devrait nous inviter à ne pas nous montrer trop cyniques devant ces usages « anciens ».

CONNAISSANCES CONTEMPORAINES

Deux questions nous semblent pertinentes ici. La première est de savoir si le cannabis a effectivement les effets thérapeutiques qui lui ont été prêtées traditionnellement ainsi que de plus récente date dans les histoires individuelles de personnes souffrant de douleurs chroniques et autres conditions. Dans l'affirmative, la seconde question, entièrement différente et répondant à des critères différents, est de savoir si le cannabis doit être considéré comme un médicament.

Utilisations thérapeutiques

La connaissance des mécanismes d'action des cannabinoïdes et du système cannabinoïde endogène permet d'abord de faire un certain nombre de constats. En termes généraux, et rappelant ce qui a déjà été dit au chapitre 5, on peut décrire l'action des cannabinoïdes de la manière suivante :

« (...) l'effet général est celui d'une inhibition de l'activité cellulaire, plutôt que de stimulation. Cela freine l'excitation du nerf, grâce à certaines réactions et notamment grâce à certains changements de milieu

¹³ Ibid., page 361.

et du mouvement des ions, ce qui modifie la réaction de la cellule à l'excitation, et notamment la façon dont elle communique avec les autres cellules de la chaîne.

Cette action inhibitrice se fait par le truchement d'une ouverture des canaux de potassium, entraînant une excitation décroissante de la cellule, et une fermeture des canaux de calcium, entraînant une inhibition générale de l'activité cellulaire. Voilà donc des mécanismes qui peuvent avoir des conséquences thérapeutiques importantes, dans certaines situations cliniques, de douleurs ou de spasmes, puisqu'on diminue l'activité nerveuse dans les réseaux de transmission de la douleur. »¹⁴

De manière plus spécifique, les cannabinoïdes agissent sur divers systèmes neurophysiologiques associés à la douleur, soit seuls, soit en association avec le système des opiacées endogènes.¹⁵ Les cannabinoïdes agissent sur la libération de sérotonine qui est elle-même associée à diverses formes de douleur, notamment les migraines. L'anandamide, et d'autres antagonistes cannabinoïdes bloquent la libération de sérotonine et de la ketanserine, toutes deux associées aux migraines, laissant présumer de l'effet potentiel du THC. Les cannabinoïdes sont aussi reliés au système dopaminergique, dont il a été démontré qu'il est relié aux migraines et à d'autres formes de douleur. De même, les cannabinoïdes inhibent l'action de la prostaglandine, permettant ainsi une action anti-inflammatoire. Certaines études ont démontré que le THC était en ce sens un analgésique plus puissant que l'aspirine ou même que la cortisone. Interagissant avec les systèmes opioïdes endogènes, les cannabinoïdes augmentent la libération de beta-endorphines qui réduisent les effets des migraines. Selon certaines études, les applications thérapeutiques du THC seraient potentiellement plus importantes que celles de la morphine, soit parce que plus spécifiques dans certains cas, soit parce que dans d'autres cas la morphine aggrave certaines symptomatologies, soit encore parce que le THC n'a pas les propriétés sédatives de la morphine. De même, le THC aurait un effet antinociceptif sur la matière grise de l'aire périacqueductale. Enfin, le THC agit comme bloquant de la libération des glutamates, permettant ainsi de réduire les douleurs musculaires et inflammatoires.

[Traduction] « *Les chercheurs italiens Nicolodi, Sicuteri et leurs collègues ont récemment élucidé le rôle des antagonistes du NMDA pour éliminer l'hyperalgésie des migraines, des maux de tête quotidiens chroniques, de la fibromyalgie, et d'autres mécanismes de la douleur. Ils ont suggéré que les acides gaba et la ketamine pouvaient agir comme agents bloqueurs du système de la douleur et améliorer la condition du patient. À partir de ces observations et relations, il est logique que l'usage prolongé du THC comme prophylactique puisse produire des bénéfices similaires, comme le démontrait déjà la pratique thérapeutique des maux de tête chroniques au XIX^e siècle par l'usage d'un extrait de chanvre indien.* »¹⁶

¹⁴ Dr Mary Lynch, Directrice, consortium canadien de recherche sur les cannabinoïdes, professeure, Université Dalhousie, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 11 juin 2001, fascicule 4, page 49.

¹⁵ Les informations qui suivent sont tirées notamment de Russo, *op. cit.*, Hartel, C.R., « Therapeutic Uses of Cannabis and Cannabinoids. » in Kalant, H. (ed.) *The Health Effects of Cannabis*. Toronto : Addiction Research Foundation, et de INSERM (2001), *op.cit.*

¹⁶ Russo, *op. cit.*, page 365.

Concrètement, ces mécanismes d'action signifient que les cannabinoïdes peuvent avoir des effets bénéfiques dans une série de situations impliquant notamment mais pas exclusivement la douleur. Les principales sont les suivantes.

- **Antiémitique** : dans les cas de traitement par chimiothérapie de personnes atteintes de cancer, les nausées ressenties suite au traitement sont une condition fréquente. C'est d'ailleurs suite à une série de cas cliniques sur des personnes rapportant avoir soulagé leurs vomissements par suite de consommation de cannabis que les composés synthétiques drabinol (ou Marinol) ainsi que nabilone (ou Cesamet) ont été développés et testés principalement aux États-Unis et en Grande-Bretagne depuis les années 1970. Selon le Dr Lynch, « *les cannabinoïdes sont considérés comme un antiémétique doux. Il y a d'autres antiémétiques disponibles plus efficaces. Cependant, comme les antiémétiques fonctionnent à partir d'un certain nombre de mécanismes assez divers, et parce que nous avons besoin de viser plusieurs mécanismes à la fois pour traiter la nausée et les vomissements, les cannabinoïdes semblent être prometteurs, et nous offrir une nouvelle possibilité.* »¹⁷
- **Cachexie** : un nombre important de personnes atteintes de VIH Sida souffrent d'une anorexie progressive accompagnée de perte de poids. Certains travaux démontrent que les cannabinoïdes peuvent contribuer à améliorer cette situation, notamment parce que le THC augmente l'appétit. Certaines réserves ont été émises relativement aux effets nocifs du THC fumé sur le système immunitaire : [Traduction] « *Plus récemment, Nieman et coll., (1993) ont démontré que le fumage de tabac chez les personnes séropositives serait associé à un développement plus rapide du Sida parce que fumer augmente la prévalence de Pneumocystis carinii pneumonia (PCP).* »¹⁸ D'autres par contre arrivent à des conclusions différentes : [Traduction] « *L'une des préoccupations de santé publique concerne les effets du cannabis sur le VIH/Sida. Au moins quatre études peuvent réduire ces inquiétudes. Kaslow et coll., (1989) n'ont trouvé aucune preuve que le cannabis accélérât les paramètres d'immunodéficience chez les personnes séropositives. DiFranco et coll., (1996) ont indiqué n'avoir observé aucune accélération du VIH au Sida chez les usagers de cannabis. Whitfield, Bechtel et Starich (1997) n'ont observé aucun effet nocif du cannabis chez les patients atteints de VIH / Sida, même chez ceux qui avaient le niveau de CD4 le plus faible. Enfin, Abrams et coll., (2000) ont mené une étude randomisée, partiellement aveugle avec contrôle placebo, chez des personnes séropositives, sur les inhibiteurs de protéase. Ils n'ont observé aucun effet négatif sur le compte de CD4 découlant de l'usage du cannabis.* »¹⁹

¹⁷ Dr Mary Lynch, *op. cit.*, page 52.

¹⁸ Hartel, R.D., *op. cit.*, page 465.

¹⁹ Russo, E.B., et coll., (2002) « Chronic cannabis use in the compassionate investigational new drug program : An examination of benefits and adverse effects of legal clinical cannabis. » *Journal of Cannabis Therapeutics*, vol 2, no 1, page 45.

- **Glaucome :** le glaucome est une maladie oculaire qui se manifeste notamment par une pression intraoculaire de plus en plus grande à cause de difficultés de drainage du liquide qui coule dans l'œil, et entraîne la destruction progressive des nerfs oculaires. L'utilisation du cannabis, notamment de pâte à base de feuilles de cannabis, pour diminuer la pression intraoculaire est connue depuis les temps anciens comme nous l'avons vu à la section précédente. Des études récentes tendent à indiquer que le cannabis permet de réduire les effets du glaucome – incluant le cannabis fumé. Par contre, certaines réserves ont été émises en raison de certains effets secondaires du cannabis fumé (rougeur et sécheresse des yeux). Dans une étude de cas menée par Russo et coll., sur quatre patients utilisant du cannabis fumé, une patiente atteinte de glaucome affirmait en cour que le cannabis lui avait sauvé la vue.
- **Antispasmodique et anticonvulsif :** les propriétés anticonvulsives du cannabis pour contrôler les crises d'épilepsie et antispasmodiques dans les cas de sclérose en plaques sont bien connues au Canada puisque, notamment dans le premier cas, elles ont été à l'origine de la décision de la Cour d'appel de l'Ontario dans l'arrêt Parker. Le cannabis fumé aussi bien que les cannabinoïdes synthétiques semblent efficaces pour contrôler ces manifestations. Toutefois, la biodisponibilité des composés synthétiques (entre 20 % à 30 %) et leur effet retardé par rapport au cannabis fumé, semblent à l'origine de la préférence de ces patients pour le fumage.
- **Analgésique :** les effets analgésiques du cannabis pour calmer une série de douleurs sont aussi connus depuis l'antiquité. Nous en avons décrit, plus haut, les mécanismes d'action. Plus important encore, le cannabis a des effets spécifiques sur certaines douleurs que les opiacées n'ont pas.

Le cannabis comme médicament ?

Pour qu'un produit soit reconnu comme médicament dans la pharmacopée, il doit répondre à au moins trois critères :

- **Qualité :** le dosage doit être établi selon une composition constante et connue facile à administrer au patient ;
- **Efficacité :** des essais cliniques rigoureux doivent avoir établi l'efficacité du médicament ; et
- **Sécurité :** les études doivent permettre d'établir les effets secondaires prévisibles et connus du médicament.

En raison de l'absence d'études cliniques rigoureuses, suivant les protocoles reconnus, le cannabis à l'état pur n'a pas encore rencontré ces critères. Une série de raisons peuvent expliquer cette situation. Premièrement, les protocoles de recherche requis pour tester les médicaments impliquent des tests en double aveugle avec groupe de contrôle et randomisation des sujets, toutes conditions qu'il est difficile de réaliser avec le cannabis. Deuxièmement, le climat juridique actuel limite la capacité de mener de telles études, tant en termes de la disponibilité du cannabis que des conditions expérimentales. Troisièmement, le cannabis rendu disponible par le *National Institute of Drug Abuse* (NIDA) pour les recherches médicales – incluant celles menées par Santé Canada – est de qualité douteuse²⁰ : alors que la concentration en THC peut être un élément déterminant pour la qualité des effets thérapeutiques, le cannabis fourni par le NIDA ne contient qu'entre 1,8 % et 5 % de THC. De plus, un cannabis plus faible requiert davantage de tiges et libère plus de CO qu'un cannabis à plus haute teneur. Les autres cannabinoïdes présents ne sont pas mesurés alors qu'on sait qu'ils interviennent aussi dans les propriétés médicales du cannabis. Le papier dans lequel les cigarettes sont roulées serait de mauvaise qualité. Le cannabis est souvent âgé de plus de deux ans et n'a pas nécessairement été conservé dans des conditions lui permettant de conserver toutes ses qualités. Enfin, il contiendrait beaucoup de graines et autres détritiques de la plante. Quatrièmement, il est difficile de contrôler la quantité de cannabis réellement absorbé par les sujets : la manière de tirer sur la cigarette, l'habitude de fumer ou non, les préférences de chaque sujet, le temps durant lequel le sujet inhale, sont autant de facteurs qui peuvent influencer les conditions expérimentales et que les chercheurs n'arrivent pas à mesurer avec précision.

Il faut aussi pouvoir répondre à certaines questions, notamment :

- Y a-t-il une différence entre les cannabinoïdes synthétiques et le cannabis à l'état pur ?
- Quel profil de cannabis est optimal dans quelles circonstances ?
- Les diverses formes de dosage et d'ingestion entraînent-elles des différences significatives ?

Au cours des dernières années, des synthèses de la littérature scientifique ont été proposées par l'Institut américain de médecine, la société britannique de médecine, et divers rapports gouvernementaux, notamment au Royaume-Uni et aux Pays-Bas. L'Institut américain de médecine a conclu notamment qu'il existe des indications sur le potentiel thérapeutique du cannabis comme analgésique, antiémétique et stimulation de l'appétit. Il a cependant souligné que le cannabis fumé est un moyen d'ingestion difficile à contrôler qui a aussi des effets secondaires, spécifiquement eu égard à son potentiel cancérigène et aux maladies respiratoires. L'Institut a aussi observé que les effets psychoactifs du cannabis sont parfois bénéfiques pour certains patients mais pas dans tous les cas. Enfin, l'Institut a souligné que le cannabis fumé ne devrait pas être

²⁰ Russo, *op. cit.*, note 17, fait une discussion plus poussée de ces diverses faiblesses.

recommandé à long terme en raison de ses effets physiques potentiels mais qu'il pourrait être prescrit dans les cas de maladies terminales ou dégénératives où les préoccupations à long terme sont secondaires. Aux Pays-Bas, le Conseil national de la santé a émis un avis en 1995 soulignant que les preuves scientifiques sur l'usage médical de cannabis sont insuffisantes en raison de devis de recherche faibles et d'imprécisions quant aux propriétés du cannabis fumé. Il a aussi indiqué que le cannabis pourrait avoir des applications thérapeutiques dans les domaines suivants : nausées et vomissements reliés à la chimiothérapie, stimulation de l'appétit pour les sidéens et cancéreux, sclérose en plaque et glaucomes. En 2001, les Pays-bas ont créé un Bureau sur l'utilisation du cannabis médical au sein du ministère de la Santé et commencé des études cliniques. Au Royaume-Uni, la Chambre des Lords a adopté une position similaire à celle de l'Institut américain de médecine et le ministère de la Santé mène présentement au moins une étude clinique.

Il est clair que **les connaissances sur le cannabis sont insuffisantes pour l'établir comme médicament au sens strict et que les connaissances sur les cannabinoïdes sont encore partielles.** En ce qui concerne les cannabinoïdes, il s'agit le plus souvent d'un seul composé cannabinoïdique, alors que le cannabis contient plusieurs substances dont les effets interagissent pour entraîner les bénéfices thérapeutiques. Mais la recherche n'a pas encore permis de déterminer spécifiquement le rôle des divers cannabinoïdes. Les patients utilisant les composés synthétiques à base de dronabinol ou de nabilone rapportent le plus souvent ne pas ressentir les mêmes effets bénéfiques que lorsqu'ils fument l'herbe. Les effets seraient plus lents à se faire sentir et moins spécifiques. De plus, le fait d'isoler un seul des composants du cannabis serait, selon un certain nombre d'études, relié à une augmentation des risques de crises d'anxiété voire de psychose cannabinique.

[Traduction] « *Le fait que la marijuana naturelle puisse être fumée constitue un avantage significatif puisque son action est plus rapide et que le patient peut ajuster la dose. (...) Les rapports provenant de patients et d'oncologues indiquent que la marijuana fumée est légèrement plus efficace et aussi sécuritaire que les cannabinoïdes oraux disponibles légalement. Au-delà des avantages reliés à la forme fumée de la marijuana, une autre différence importante entre la marijuana et le THC, tient au fait que le 9-THC isolé peut entraîner relativement souvent des crises d'anxiété et des attaques de panique. (...) Ces effets peuvent aussi se produire avec la marijuana, mais ils sont moins importants en raison de la présence de cannabidiol, un composé non psychoactif qui a des propriétés antipsychotiques.* »²¹

Enfin, il faut aussi compter avec les coûts des composés synthétiques, qui sont nettement plus élevés que ceux de l'herbe.

En ce qui concerne le cannabis fumé, ses avantages sont de permettre au patient d'établir lui-même la dose nécessaire et de ressentir les effets plus rapidement, tout en limitant les effets secondaires nocifs, sauf les effets sur les voies respiratoires. Notons

²¹ Gurley, R.J., Aronow, R. & M. Katz (1998) «Medicinal marijuana : A comprehensive review.» *Journal of Psychoactive Drugs*. Vol 30, no 2, page 139.

d'ailleurs au passage l'importance de cet effet de modulation de l'usage par les patients : la plupart des cas cliniques rapportés ainsi que les témoignages des responsables des organismes de compassion, s'accordent pour affirmer que les patients préfèrent consommer du cannabis plus concentré en THC que ceux qui en font un usage récréatif, mais qu'ils ne prennent que la quantité nécessaire pour obtenir les effets calmants. Par contre, les difficultés reliées à la connaissance précise de son efficacité et de sa qualité font défaut, limitant ainsi la capacité du médecin à prescrire la dose appropriée. Les connaissances les plus avancées sur le cannabis fumé concernent son degré de sécurité, même si l'interprétation des données n'est pas unanime. Nous partageons généralement la conclusion du professeur Scholten :

[Traduction] « L'usage du cannabis à des fins médicales chez les patients ayant une condition somatique est relativement sécuritaire, à condition de ne pas être fumé. Lorsque fumé, le cannabis a le même potentiel cancérigène que le tabac. Les alternatives sont l'administration par voie orale ou l'inhalation par un vaporisateur.

La toxicité aiguë du cannabis est très faible ; il est presque impossible de faire une surdose de cannabis (il faudrait manger ou fumer l'équivalent de son poids en cannabis frais, soit environ 7 500 grammes de cannabis séché). Les principaux effets secondaires du cannabis en thérapeutique sont la psychose et l'euphorie. On sait peu de choses du potentiel addictif du cannabis thérapeutique mais les connaissances acquises sur l'usage de la morphine comme analgésique démontrent que le risque de dépendance psychologique est beaucoup plus faible en situation médicale que lorsqu'elle est utilisée comme stimulant. Puisque le potentiel addictif du cannabis est faible lorsqu'il est utilisé comme stimulant, on peut penser qu'il en serait de même en situation clinique.

En ce qui concerne la toxicité chronique du cannabis, il faut se rappeler que les doses utilisées aux fins thérapeutiques seront probablement moins élevées que pour les usages récréatifs, réduisant ainsi les risques d'effets secondaires. »²²

Cela signifie-t-il qu'il faut décourager voire interdire l'usage du cannabis, surtout du cannabis fumé, dans un contexte thérapeutique ? La dernière section se penche sur cette question.

PRATIQUES THÉRAPEUTIQUES ACTUELLES

Les principales réserves sur l'utilisation thérapeutique de l'herbe concernent d'une part l'absence de connaissances rigoureuses provenant d'études médicales contrôlées, et d'autre part ses effets secondaires à long terme sur les voies respiratoires et son potentiel cancérigène. Dans certains cas, des réserves sont aussi exprimées sur les propriétés psychoactives du cannabis. Par ailleurs, il se dégage un consensus de plus en

²² Scholten, W.K. (2002) « Medicinal cannabis : A quick scan on the therapeutic use of cannabis. » in Pelc, I., (ed.) *International Scientific Conference on Cannabis*. Bruxelles.

plus large sur le potentiel thérapeutique du cannabis, notamment pour la plante fumée. Si le cannabis ne peut, à proprement parler, être considéré, pour le moment du moins, comme médicament, mais qu'il a néanmoins des propriétés thérapeutiques, comment alors le classer et le gérer ?

Il s'est développé, dans plusieurs pays, notamment au Canada et aux États-Unis, une pratique parallèle de recours à l'herbe par des personnes souffrant de certaines conditions. L'exemple le plus connu au Canada est sûrement celui du Club Compassion de Vancouver.

Dans son énoncé de mission, l'organisme propose une approche holistique de la santé. Il fournit non seulement du cannabis mais aussi d'autres formes de médecines naturelles (herbothérapie, acupuncture, massages, etc.). Il s'appuie sur les valeurs de compassion, d'affranchissement, de complémentarité entre les approches.

Il s'est développé, au cours des six années d'existence du Club Compassion, une connaissance intime des effets thérapeutiques du cannabis. Le Club offre en permanence entre sept à dix variétés de cannabis, une ou deux de haschich, de la résine de cannabis et des pains et gâteaux au cannabis. Il vend l'herbe entre 3 \$ et 10 \$ le gramme, selon la variété. Il offre des services à plus de 2 000 membres/clients maintenant.

« Nos membres présentent les symptômes et les états les plus divers : le VIH et le sida, le cancer, la sclérose en plaques, l'arthrite, la douleur chronique, le fibromyosite, l'épilepsie, le glaucome, l'hépatite C, l'anxiété, la dépression, l'insomnie, les troubles alimentaires et bien d'autres affections encore.

(...)

Il importe que les consommateurs de cannabis à des fins médicales aient accès à différentes variétés du produit car l'effet du cannabis dépend de la variété employée et de la méthode d'ingestion. Nous expliquons les différences pertinentes à nos membres, qui peuvent alors choisir la variété de cannabis qui convient le mieux pour traiter efficacement leurs symptômes.

L'indica et le sativa sont les deux principales variétés de cannabis utilisé à des fins médicinales. Nombre de souches résultent du croisement de ces deux variétés. À l'intérieur de chacune de ces variétés et de ses croisements, il y a un nombre extraordinairement élevé de souches individuelles, dont chacune comporte des effets et des caractéristiques cannabinoïdes qui lui sont propres.

Selon les données empiriques dont on dispose, les souches d'indica ont un effet calmant et sont efficaces pour contrer l'anxiété, la douleur, la nausée, pour stimuler l'appétit, pour susciter le sommeil, pour vaincre les spasmes musculaires et les tremblements entre autres symptômes. Les souches du sativa ont davantage un effet stimulant, efficace pour stimuler l'appétit, soulager la dépression, les migraines, les douleurs et les nausées. Nous sommes maintenant au courant de souches spécifiques qui sont efficaces pour traiter des symptômes et des états particuliers. Les membres notent leur consommation afin de repérer la souche la plus efficace dans leur cas. Nous effectuons également un suivi serré des membres afin de pouvoir les aider à connaître leurs propres habitudes de consommation et, pour nous-mêmes, afin de pas revendre aux mêmes personnes et afin d'encourager une consommation responsable. »²³

²³ Mme Hilary Black, directrice du Club Compassion de Vancouver, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la trente-septième législature, 7 novembre 2001, fascicule no 10, page 36.

À la lecture de ce témoignage et des documents qui nous ont été remis par le Club, suite à la visite que nous avons faite des locaux de l'organisme et de l'occasion qui nous a été offerte de voir ses dossiers, suite aussi aux témoignages d'autres personnes oeuvrant dans des organismes similaires à Montréal et à Toronto, nous ne pouvons que constater les rapprochements entre cette pratique thérapeutique et les données issues de la recherche sur les applications médicales du cannabis.

Nous observons aussi que cet organisme, comme les autres qui fournissent un service similaire au Canada, tiennent des registres détaillés de leurs clients et de leur consommation de cannabis, matériel qui permet un suivi thérapeutique mais qui pourrait aussi constituer un excellent matériau de recherche empirique. **Nous ne pouvons que regretter que Santé Canada n'ait pas engagé un processus de recherche clinique en collaboration avec cet organisme.** Nous partageons d'ailleurs les réserves exprimées par Mme Black quant aux protocoles traditionnels de recherche sur les applications thérapeutiques du cannabis :

« Nous avons dressé un plan de recherche de concert avec une équipe de scientifiques de Vancouver. Notre proposition a toutefois été rejetée parce que nous refusons de faciliter une étude qui comporte l'utilisation d'un placebo ou d'une variété de cannabis de faible qualité et de faible puissance importée de la National Institute on Drug Abuse des États-Unis. Toute étude visant à prouver l'efficacité du cannabis en tant que médicament, mais à l'aide d'une plante à faible puissance ou de souches inconnues comme celles que cultivent actuellement Prairie Plant Systems et Santé Canada est vouée à l'échec. Il n'est pas nécessaire d'importer du cannabis aux fins des recherches car nous produisons au Canada un cannabis de première qualité en quantité énorme. L'information que nous pourrions recueillir est demandée par des médecins, des patients, des compagnies pharmaceutiques, Plant Prairie Systems et Santé Canada ; néanmoins, nous n'avons pas les moyens financiers de faciliter les recherches en question. »²⁴

Personne ne niera qu'il faut continuer les recherches sur les applications thérapeutiques du cannabis, fumé ou de synthèse, afin de tenter de mieux connaître les éléments clés de qualité, d'efficacité et de sécurité. Chacun soutient qu'il y aurait intérêt à mieux connaître les souches et dosages appropriés à diverses conditions. Pour autant, faut-il penser faire du cannabis un médicament au même titre que les médicaments inscrits dans la Pharmacopée ? Faut-il avoir les mêmes exigences que celles qui concernent les médicaments prescrits ou plutôt assouplir les règles pour en faire une médecine naturelle alternative ? S'il n'en était du régime juridique et des Conventions internationales qui régissent le cannabis, cette plante ne serait-elle pas plutôt considérée comme une médecine naturelle au même titre que d'autres plantes et herbes ?

Penser en ces termes nous force à réfléchir autrement à la question des applications thérapeutiques du cannabis. Si l'on cherche à en faire un médicament, les réserves du corps médical, du moins d'un certain nombre de ses représentants, peuvent se comprendre : tant que n'ont pas été menées les études contrôlées requises qui

²⁴ *Ibid.*, page 39.

permettront aux médecins de le prescrire avec la même confiance qu'ils le feront d'un médicament dûment inscrit, ils ne pourront que se dissocier de cette approche. Si l'on reconnaît que le cannabis a des applications thérapeutiques dans un certain nombre de cas – au moins aussi éprouvées que pour n'importe quelle autre plante utilisée en homéopathie ou en herbothérapie – alors il s'agit plutôt de lui donner un statut équivalent aux médecines naturelles.

CONCLUSIONS

Le Comité est d'avis que les applications thérapeutiques potentielles du cannabis ont été **suffisamment bien documentées pour que son utilisation à des fins thérapeutiques soit permise**. Il convient de reconnaître que sous sa forme fumée, le cannabis peut présenter certains effets secondaires nocifs, notamment sur les voies respiratoires et d'en aviser les usagers conformément. Il convient aussi de reconnaître que des études sont nécessaires pour préciser davantage le champ spécifique d'application du cannabis et ses effets sur le long terme.

Conclusions du chapitre 9

Applications thérapeutiques

- Il existe des indications claires, quoique non définitives sur les bénéfices thérapeutiques du cannabis dans les conditions suivantes : analgésique pour les douleurs chroniques, antispasmodique pour la sclérose en plaques, anticonvulsif pour l'épilepsie, antiémétique pour la chimiothérapie et stimulation de l'appétit pour la cachexie.
- Il existe des indications moins claires quant aux effets du cannabis sur le glaucome et d'autres conditions médicales.

Le cannabis comme médicament

- Le cannabis n'a pas été établi comme médicament par des études contrôlées et rigoureuses.
- La qualité et l'efficacité du cannabis, principalement fumé, n'ont pas été déterminées dans des études cliniques rigoureuses.

Cannabis et composés synthétiques

- Les composés synthétiques ont fait l'objet d'un certain nombre d'études mais les connaissances sont encore insuffisantes pour en établir l'efficacité et la sécurité.
- Règle générale, les effets du cannabis fumé sont plus spécifiques et plus rapides que ceux des composés synthétiques.

	<ul style="list-style-type: none"> ➤ L'absence de certains cannabinoïdes dans les composés synthétiques peut entraîner des effets secondaires nocifs tels les crises de panique ou les psychoses cannabiques. ➤ Le cannabis fumé présente des effets nocifs potentiels surtout sur les voies respiratoires. ➤ Les personnes qui fument du cannabis à des fins thérapeutiques modulent leur consommation en fonction de leur condition physique et n'en recherchent pas tant les effets psychoactifs. ➤ Les personnes qui fument du cannabis à des fins thérapeutiques préfèrent avoir le choix de la forme d'utilisation.
Pratiques thérapeutiques	<ul style="list-style-type: none"> ➤ Il convient de soutenir et d'encourager le développement des pratiques alternatives telles que mises en œuvre dans les clubs compassion. ➤ Les pratiques de ces organismes sont en accord avec les indications thérapeutiques provenant des études cliniques et respectent des règles strictes de qualité et de sécurité.
Recherche	<ul style="list-style-type: none"> ➤ Les études déjà approuvées par Santé Canada doivent être menées dans les meilleurs délais. ➤ Les qualités du cannabis utilisé dans ces études doivent correspondre aux standards de la pratique actuelle dans les organismes de compassion et non aux standards de NIDA. ➤ Les études devraient notamment porter sur les applications et le dosage spécifiques pour différentes conditions médicales. ➤ Santé Canada devrait, dans les meilleurs délais, engager une étude clinique en collaboration avec les organismes de compassion au pays.

CHAPITRE 10

OPINIONS ET ATTITUDES DES CANADIENS

L'un des objectifs importants que nous avons poursuivi tout au long de nos travaux était d'impliquer les Canadiens. Nous voulions par là entendre leurs opinions, leurs expériences, leurs appréhensions face au cannabis. Et nous voulions aussi rendre accessible l'information dont nous disposions de sorte à contribuer, à la hauteur de nos modestes moyens, à une meilleure connaissance des réalités du cannabis, seule à même de hausser le niveau des débats publics. Au début de chacune des audiences publiques, le président du Comité le présentait d'ailleurs en ces termes :

« Le second de ces enjeux est celui du partage de la connaissance. Il s'agit assurément du plus noble. Le Comité désire que les Canadiens de partout s'informent et partagent l'information que nous avons recueillie. Notre défi sera de planifier et d'organiser un système assurant l'accessibilité et la diffusion de cette connaissance. Nous voudrions aussi connaître les vues de la population sur cette connaissance. Pour ce faire, nous tiendrons, au printemps 2002, des audiences publiques dans divers lieux au Canada. »

Et ce défi était effectivement de taille. C'est une chose en effet de rendre disponible, de manière passive, une série d'informations, tant sous la forme des comptes-rendus de nos audiences que de rapports de recherche. C'en est une autre d'avoir les moyens de faire connaître largement cette information. Et c'en est encore une autre que de saisir le pouls de la société canadienne.

Pour transmettre l'information aux Canadiens, nous avons choisi d'utiliser pleinement notre site Internet y logeant tous nos documents au fur et à mesure qu'ils étaient prêts. Pour stimuler sa circulation, nous avons utilisé deux outils principaux. Le premier, conventionnel, celui des médias : attirer le plus possible une couverture de presse dans le but de faire connaître la nature de nos travaux, voire tout simplement l'existence de ce Comité. Dans la même veine, certains membres du Comité ont aussi participé à des conférences, à des tables rondes, à des lignes ouvertes. Le second moyen, qui nous est apparu essentiel pour faire connaître nos travaux, a été la publication, en mai 2002, d'un document de discussion. Ce document énonçait un certain nombre de nos conclusions préliminaires de recherche autour de huit questions clés, proposait un certain nombre d'options de politiques publiques, et identifiait des questions pour animer les débats publics. En plus de viser à transmettre nos connaissances et de susciter l'intérêt de la population, ce document avait pour objectif

de servir de toile de fond aux audiences publiques que nous avons tenues dans diverses villes du pays aux mois de mai et juin 2002.

Seul l'avenir dira si, et dans quelle mesure, nous avons réussi à faire connaître nos travaux et surtout à augmenter le niveau de connaissances sur le cannabis dans la population. Nous n'avions pas les moyens financiers de mener une vaste campagne d'information publique non plus que de mener une enquête d'opinion avant et après la publication du document de discussion pour déterminer si nous avions eu un impact auprès de nos concitoyens.

Il est beaucoup plus difficile de saisir l'état de l'opinion, des attitudes et des représentations de la population. Les moyens traditionnels de l'enquête quantitative sur un échantillon représentatif de la population étaient trop dispendieux. Les sondages présentent aussi toute une série de limites dont nous discuterons plus amplement plus loin. Par contre, nous avons commandé une étude qualitative par groupes de discussion dont nous présenterons les résultats dans ce chapitre. Nous rapporterons aussi les résultats de sondages dont nous avons pu prendre connaissance. De plus, de nombreux citoyens nous ont écrit des lettres ou envoyé des courriels et un certain nombre ont participé à nos audiences publiques. On ne peut évidemment en tirer de conclusions : il est probable que seuls ceux que la question intéresse de près nous auront écrit, quel que soit le côté où penchent leurs préférences. Nous en citerons des extraits en insistant sur l'importance de ne rien conclure quant à la représentativité de ces opinions.

On ne saurait faire état de l'opinion et des représentations que se font les Canadiens des drogues en général, du cannabis en particulier, sans examiner aussi le rôle des médias dans la construction de ces représentations. Au cours des dernières années, suite entre autres aux travaux de ce Comité, divers journaux et magazines canadiens ont réalisé des reportages ou écrit des commentaires éditoriaux sur la question. Ce sera l'objet de la première section de ce chapitre. La suivante présente les résultats d'enquêtes et de sondages, incluant celle que nous avons commandée et certaines qui ont été menées dans certaines provinces. La dernière section porte sur notre compréhension de ce que les Canadiens nous ont dit.

LES MÉDIAS

Au début du siècle, les médias ont joué un rôle important dans la construction de la « panique » morale sur les drogues illicites. Ce fut d'abord le « péril jaune » et la crise de l'opium au début du XXe siècle, principalement à Vancouver.¹

¹ Sur cette question, voir les analyses de Giffen, P.J. et coll., (1991) *Panic and Indifference. The Politics of Canada's Drug Laws*. Ottawa : Canadian Centre on Substance Abuse ; Boyd, N. (1991) *High Society : Illegal and Legal Drugs in Canada*. Toronto : Key Porter Books.

[Traduction] « La tolérance pour l'habitude de fumer de l'opium s'est maintenue aussi longtemps que celles des Britano-Colombiens pour les Chinois. Au cours des premières années du XXe siècle, le surplus de main d'œuvre et le sentiment antiasiatique dans la population se sont tous deux accentués. (...) Au cours des cinq premières années du XXe siècle, il y avait sur pratiquement toutes les premières pages du « Province » de Vancouver des caricatures racistes mettant en garde les lecteurs contre le péril jaune, dépeignant la façon dont la Colombie-Britannique allait être absorbée par les Chinois et annonçant l'arrivée d'un autre bateau de Chinois.»²

Ainsi, ce texte du *Canadian Magazine* en 1900 :

[Traduction] « Il était évident qu'il (le serviteur chinois) avait en sa dose et plus encore, car on trouve à Vancouver des fumeries chinoises d'opium où se pratiquent des habitudes infâmes et indicibles. Peu importe l'apparence soignée et docile de votre Chinois, peu importe la douceur de sa voix et ses manières invitantes, vous pouvez être certain de le trouver, chaque samedi soir, dopé dans son antre et rêvant sous les volutes du pavot. »³

Ce fut ensuite le fléau de la cocaïne à Montréal dont témoigne cet article du *Witness* de Montréal de 1910 :

« Ce fléau de la cocaïne n'existe que depuis quelques temps dans cette ville. C'est un mal réel, une plaie sociale, et il se répand de façon si terrible qu'il est temps que la société s'en préoccupe. L'alcoolisme et la morphinomanie ne sont rien en comparaison de l'habitude de la cocaïne. Celle-ci est le moyen auquel on a recours en vue de la séduction de nos jeunes filles et de la démoralisation de nos jeunes gens (...) ceux qui connaissent ce qu'est réellement la cocaïne et les malheurs qu'elle occasionne, ceux-là, s'ils permettent l'usage de cette drogue, nuisent à la société elle-même dans la mesure la plus large possible. »⁴

Cette vision de la déchéance et de la dégénérescence de la classe ouvrière, et plus largement de la civilisation anglo-britannique et chrétienne, sera ensuite relayée par les mouvements de tempérance. Un personnage important de l'histoire des femmes au Canada, Emily Murphy, allait jouer un rôle prédominant au cours des années 20 dans l'articulation de cette vision d'apocalypse. Écrivaine et journaliste, elle a été présidente du *Canadian Women's Press Club* (1913-1920), première présidente de la Fédération des instituts féminins, membre du Conseil national des femmes du Canada, avant de devenir juge en Alberta. Elle s'est aussi battue pour que la constitution canadienne reconnaisse les droits des femmes. Et elle a été une activiste infatigable dans la lutte contre les drogues. Dans une série de textes publiés dans le magazine *MacLean* en 1920, elle s'en prenait au « fléau » de la drogue.

² Boyd, N., *op. cit.*, pages 27-29.

³ Cité dans Giffen, P.J., *op. cit.*, page 61.

⁴ Cité par McKenzie King dans Hansard, Chambre des Communes, 26 janvier 1911, pages 2641-2642.

[Traduction] « Peu importe la façon dont une drogue est consommée, elle provoque la dégradation morale et affaiblit la volonté. Peu importe leur statut social, les consommateurs invétérés deviennent des dépravés. Ils sont tous menteurs et la plupart d'entre eux deviennent malhonnêtes. S'ils sont privés de drogues, ils feront tout pour en obtenir, même si cela implique le vol ou la prostitution. L'abstinence de consommer au cours d'une longue période provoque une douleur semblable à celle d'un clou qui enfonce la peau. »⁵

En 1922, dans son livre *The Black Candle*, elle s'attaquait aussi à la marijuana qu'elle décrivait dans ces termes :

[Traduction] « Les personnes qui font usage de cette drogue fument les feuilles séchées de la plante, ce qui leur fait perdre complètement la raison. Elles n'ont plus aucun sens moral et, sous l'influence de cette substance, deviennent insensibles à la douleur. Elles sont alors en proie à la folie furieuse et capables de tuer ou de se livrer à toutes sortes de violences sur d'autres personnes, en utilisant des méthodes d'une cruauté barbare, et comme nous l'avons dit, en ne faisant preuve d'aucun sens moral. Lorsqu'elles sont sous l'influence de cette drogue, ces victimes représentent les pires conditions de vie imaginables. Elles sont privées de toute volonté et sont mentalement déficientes. Si cette substance est consommée en trop grande quantité, elle provoque ultimement la mort du toxicomane. »⁶

Au delà de l'emphase verbale de ces divers textes et du racisme envers les Asiatiques, on peut constater une certaine ressemblance entre les discours de l'époque et certains discours contemporains sur les drogues : elles s'attaquent aux racines morales de la société et en particulier à la famille, elles menacent la jeunesse, elles causent la criminalité et la violence ; les dealers sont partout, surtout près des écoles, prêts à tout pour assurer la reproduction de leur clientèle ; et les drogues, nécessairement, mènent à la toxicomanie.

Ce n'est pas dire pour autant que les articles publiés dans les journaux soient la raison principale pour laquelle on a criminalisé les drogues. Ce n'est pas dire non plus que ce qui était écrit finissait par être ce qu'on croyait. Néanmoins, plusieurs analystes de l'évolution des lois sur les drogues au Canada s'entendent pour souligner l'importance des médias dans l'architecture des lois canadiennes sur les drogues.

Quelles sont les orientations des médias canadiens sur les drogues aujourd'hui ? Nous n'avons pas fait une analyse de l'ensemble de la couverture de presse sur les drogues au Canada. L'exercice eut sans doute été intéressant d'un point de vue sociologique pour identifier les notions clés, saisir les modes de représentation qui concourent à former l'opinion publique. Nous nous satisfaisons ici d'examiner deux grands types d'articles de presse. Les premiers sont de l'ordre de la nouvelle judiciaire, les seconds sont des reportages de fond et des commentaires éditoriaux.

Les articles de nouvelles traitant des drogues illicites concernent le plus souvent les opérations policières : descentes, saisies, arrestations de trafiquants et

⁵ Murphy, E., (1920) « The underground system. » *MacLeans*, 15 mars 1920.

⁶ Murphy, E., (1922) *The Black Candle*. Toronto : Thomas Allans, pages 332-333.

démantèlement de réseaux reliés au crime organisé. L'exemple contemporain le plus connu a sûrement trait au coup de filet réalisé en 2001 au Québec lors de l'arrestation de plus de 70 membres des Hells Angels dont on sait qu'ils sont entre autres impliqués dans le trafic de stupéfiants. Au delà, ce sont, mois après mois, des nouvelles saisies de kilos voire de centaines de kilos de drogues, de plus en plus souvent de marijuana.

Comment ces informations contribuent à former l'opinion publique sur les drogues, quels en sont les impacts sur les représentations que s'en fait le public, nous l'ignorons. Il est probable cependant que ces articles donnent à penser que le « problème de la drogue » est d'abord et avant tout un problème de criminalité organisée. Mais si l'on pouvait avoir l'impression, disons jusqu'au milieu des années 1980, que le cannabis était un problème exporté au Canada à partir d'autres pays, il est vraisemblable que l'augmentation des articles traitant des saisies de plantations domestiques – plutôt que de cargaisons provenant de l'étranger – mène de plus en plus à penser le cannabis comme un problème domestique.

D'autres articles de nouvelles concernent la relation entre drogues et criminalité, notamment la prostitution, les cambriolages dans les résidences, ainsi que les « incivilités » relatives aux jeunes de la rue et à l'itinérance. On continue en effet à associer au moins pour partie ces activités à la drogue. Pour la prostitution de rue, c'est le fait que les personnes, principalement les femmes, pratiquant la prostitution soient souvent amenées à cet extrême pour « payer » leur dose. Pour les cambriolages résidentiels, c'est la même raison mais le genre des auteurs change : il s'agit dans ce cas de jeunes hommes. Et pour les jeunes dans la rue, c'est le fléau de l'injection et donc de la transmission du SIDA qui préoccupe principalement. Rien de cela ne concerne directement le cannabis. Sauf pour les écoles. Il n'est probablement pas une grande – et une moins grande – ville canadienne qui n'ait, au cours des quelques dernières années, vu une opération policière dans les écoles. Ces opérations suscitent le plus souvent deux types de réactions, toutes deux fondées sur l'indignation : pour les uns c'est l'indignation de voir que les drogues soient à ce point intégrées dans les écoles, pour les autres c'est l'abus de pouvoir policier et le non-respect des droits des jeunes.

On a vu, au cours des quelques dernières années, des reportages de fond tant dans les journaux que dans les médias électroniques. La série préparée par le journaliste Dan Gardner du *Ottawa Citizen*, en 2000, et largement reprise par tous les quotidiens de la chaîne Southam, est sûrement la plus connue. Dans cette série de 10 articles, le journaliste expliquait pourquoi la « guerre à la drogue » est un échec patent. Il commençait sa série ainsi :

[Traduction] *« La campagne globale de l'Oncle Sam pour en finir avec l'abus des drogues a augmenté le pouvoir des criminels, corrompu les gouvernements et diminué les libertés civiles, et il y a plus de toxicomanes que jamais auparavant. Le 6 juin 1998, Kofi Annan, le secrétaire général des Nations Unies, a reçu une lettre étonnante. « Nous croyons », disait-elle, « que la guerre globale contre les drogues cause plus de dommages que les drogues elles-mêmes. » Cette lettre était signée par des hommes d'état, des politiciens, des universitaires et d'autres personnalités. Javier Perez de Cuellar, l'ancien secrétaire général de l'ONU était parmi les signataires. Tout comme George Shultz, l'ancien Secrétaire*

d'état américain et Joycelyn Elders, l'ancienne Médecin chef aux États-Unis. Des prix Nobel tels Milton Friedman et Adolfo Perez Esquivel d'Argentine, quatre anciens présidents et sept anciens ministres d'Amérique latine étaient parmi les signataires. Et quelques éminents Canadiens aussi. Ils ont ajouté que les politiques sur les drogues que le monde a suivies depuis quelques décennies sont un échec aux conséquences dévastatrices. Tenter d'éliminer l'abus de drogues par la prohibition a créé une industrie valant 400 milliards \$ US. « soit environ 8% du commerce international. » (...) Cette déclaration coïncidait avec le début d'une assemblée générale des Nations Unies sur les problèmes globaux des drogues. Les gouvernements participant à cette assemblée semblaient unanimes à penser que la meilleure manière de combattre l'abus de drogues était d'en bannir la production, la vente ou la possession. (...) Mais la lettre adressée à M. Annan a démontré que leur point de vue ne fait pas l'unanimité. En fait, un nombre croissant de leaders mondiaux et d'experts pensent que la guerre à la drogue n'est rien de moins qu'un désastre humanitaire.»⁷

Cette série d'articles faisait en quelque sorte écho à des commentaires éditoriaux parus dans le même Ottawa Citizen, en 1997, demandant la décriminalisation des drogues.⁸ L'éditorialiste écrivait notamment ceci dans le second de la série : « *L'histoire récente de l'application des lois sur les drogues, au Canada aussi bien qu'aux États-Unis, est l'histoire d'un échec. Les impôts financent grassement la répression. Les pouvoirs policiers augmentent au détriment des libertés civiles. Les gangs criminalisés sont de plus en plus riches. Et l'usage de drogues continue, peu importe.* »

En 1998, le Globe and Mail de Toronto en faisait autant, sous le titre « *Que fument les leaders du G8 ?* » écrivant entre autres : [Traduction] « *La prohibition ne marche pas et ne peut pas marcher, et ses coûts sont nettement supérieurs à ceux d'une politique d'accessibilité adéquatement supervisée et contrôlée. Puisque l'élimination des drogues n'est pas une option, les leaders du G8 auraient dû se demander comment minimiser les méfaits des drogues. En l'état actuel, leurs politiques maximisent les dégâts.* » Dans une série de deux éditoriaux, le Globe and Mail reprenait l'exercice en juillet 2001, recommandant la décriminalisation du cannabis. Le Vancouver Sun en faisait autant en octobre 1998 et le National Post prenait aussi position pour mettre fin à la prohibition du cannabis. Enfin, plus récemment encore, dans les suites des événements tragiques du 11 septembre 2001, l'éditorialiste du Citizen répondait à ceux qui laissaient entendre que l'argent du trafic de drogues sert à financer les actions terroristes. Il disait ce qui suit :

« En matière de lutte antidrogues, la plus récente menace soulevée par le solliciteur général Lawrence MacAulay et d'autres personnes concerne l'hypothèse selon laquelle les terroristes utiliseraient les produits du trafic de la drogue pour financer leurs activités diaboliques. Si c'est le cas, il est facile de voir pourquoi. Comme tout véritable crime, le terrorisme fait des victimes plutôt que des clients satisfaits. Il ne s'agit donc pas exactement d'une entreprise autofinancée. En revanche, le commerce de la drogue permet de réaliser constamment des profits parce que les transactions auxquelles il donne lieu sont tellement satisfaisantes pour le vendeur comme pour l'acheteur que ces derniers risquent la prison pour

⁷ Gardner, D., « Why the war on drug has failed : Uncle Sam's war. » *Ottawa Citizen*, 5 septembre 2000.

⁸ Editorial, « Decriminalizing Drugs », *Ottawa Citizen*, 12 avril 1997, 14 avril 1997, 15 avril 1997 et 16 avril 1997.

pouvoir les mener à bien. (...) (...) non seulement la lutte antidrogues entraîne le mépris de la loi et menace la sécurité publique, mais elle aide à financer les terroristes et leur permet de passer d'un pays à un autre. Et les gens veulent poursuivre cette lutte ? J'estime que, puisque toute décision vertueuse doit se prendre au nom de la vertu, il faut abolir les lois sur les drogues pour des raisons morales. Mais faites abstraction de mon dégoût pour le paternalisme. Si la lutte antidrogues diminue nos chances de gagner la lutte contre le terrorisme, alors elle fait sûrement plus de mal que de bien. »⁹

L'intérêt de ces prises de position et de ces articles de fond tient à divers éléments. Premièrement, ils marquent un changement majeur par rapport aux positions soit plus timides soit plus simplement en faveur de la prohibition qui dominaient depuis le début du siècle. Ils s'inscrivent aussi dans une interrogation constante du rôle de l'État et de l'à-propos des dépenses publiques. Ils marquent aussi, en corollaire, une préoccupation plus grande pour les libertés individuelles.

Quel en est l'impact auprès de l'opinion publique, nous l'ignorons. Traduisent-ils des sentiments largement répandus dans la population ou, au contraire, sont-ils en porte-à-faux, nous ne sommes pas en mesure de le dire. Une seule chose nous paraît relativement certaine : la plupart des grands médias canadiens ont pris une distance critique appréciable face aux politiques de prohibition.

ENQUÊTES ET SONDAGES

Selon l'un de nos témoins :

« D'après les sondages effectués au cours des dix dernières années, notamment par Santé Canada, nous savons que les deux tiers des Canadiens considèrent que la consommation de cannabis ne devrait pas être punissable d'emprisonnement et qu'environ la moitié des Canadiens préconisent explicitement la décriminalisation ou la déjudiciarisation de la consommation de cannabis. Cette opinion persiste depuis 25 ans. Autrement dit, les législateurs et les décideurs politiques n'ont tenu aucun compte jusqu'ici du message que l'opinion publique leur adresse depuis un quart de siècle. »¹⁰

L'une des limites importantes des sondages d'opinion tient à leur côté superficiel : les questions sont souvent insérées dans des enquêtes plus générales portant sur une diversité de sujets, il y a peu de place pour poser des questions multiples, et on explore rarement le sens des termes. Ainsi, par exemple, les termes légalisation ou décriminalisation n'ont pas nécessairement le même sens pour tous les répondants. Mais les sondages généralistes ne sont pas en mesure, ou prennent rarement les

⁹ William Robson, « Combien de banlieues devront flamber à cause de la lutte antidrogues ? » *Ottawa Citizen*, 17 mai 2002.

¹⁰ Dr Benedikt Fischer, professeur, école des sciences de la santé publique, Université de Toronto, témoignage devant le Comité spécial du Sénat sur les drogues illicites, Sénat du Canada, première session de la 37^e législature, 17 septembre 2001, fascicule 6, pages 13-14.

moyens, de révéler ces différences. Si l'enquête pose une seule question portant sur le cannabis, du genre «êtes-vous en faveur de la décriminalisation de la possession de petites quantités de cannabis ?», on ne sait pas ce que les répondants pensent en entendant «décriminalisation» et «petites» quantités. Pour certains, décriminalisation peut signifier aucune pénalité ; pour d'autres ce sera une amende. Et la différence entre 5 grammes et 30 grammes est énorme.

Comme les médias, et de manière toute aussi complexe, les sondages participent à la construction des représentations publiques. Comme pour les médias, il est difficile de déterminer dans quelle mesure ils contribuent à modifier les attitudes et encore plus les comportements. Ces quelques réserves émises, nous fournissons dans les paragraphes suivants un échantillon de données provenant de diverses enquêtes.

Dans l'enquête nationale sur l'alcool et les drogues de 1994, les répondants étaient invités à donner leur opinion sur les politiques concernant le cannabis : 27 % étaient d'avis que la possession de petites quantités devrait être légale ; 42 % qu'elle devrait être illégale mais ne faire l'objet d'aucune pénalité ou d'une amende seulement ; et 17 % que la possession de cannabis devrait entraîner une peine de prison potentielle dans le cas d'une première infraction. Les hommes et les plus jeunes sont plus nombreux à favoriser la légalisation du cannabis, de même que les résidents de la Colombie-Britannique, du Québec, de l'Alberta et de l'Ontario.¹¹

En 2000, le National Post relevait les résultats d'un sondage voulant que près des deux tiers des Canadiens soient en faveur de la décriminalisation de la marijuana et que la possession de petites quantités pour usage personnel soit punie par une amende.¹²

Plus récemment encore, dans le cadre d'un sondage effectué en mai 2001, 47 % des Canadiens se sont déclarés en faveur de la légalisation de la marijuana, en hausse par rapport aux 31 % de 1995 et aux 26 % de 1975.¹³

Au Québec, en 2001, une enquête plus fine a été menée sur les perceptions de la population à partir d'un échantillon de 2253 répondants (taux de réponse de 70 %).¹⁴ L'enquête portait uniquement sur les drogues, la toxicomanie et le VIH, et mesurait les connaissances, la perception de la dangerosité, la perception à l'égard des personnes toxicomanes, et les politiques et mesures possibles. L'intérêt d'une étude de ce type est que, ne portant que sur les questions relatives aux toxicomanies et aux drogues, elle permet d'approfondir et clarifier davantage certaines questions.

Cette étude révèle que la majorité (66 %) de la population pense que la consommation de drogues est en augmentation. Elle démontre aussi que « *le cannabis est dans une classe à part* » quant à la perception de sa dangerosité puisque « *seulement une personne sur quatre juge cette substance illicite dangereuse dès la première consommation, ce qui est*

¹¹ Centre canadien de lutte contre l'alcoolisme et les toxicomanies (1999) *Profil canadien. L'alcool, le tabac et les autres drogues*. Ottawa : auteur, pages 214-215.

¹² National Post, « Two-thirds favour decriminalizing pot. » 15 mai 2000.

¹³ Julian Beltrame, « Reefer Madness : The Sequel. » *MacLean's*, 6 août 2001, vol 114, pages 22-25.

¹⁴ Hamel, D. et coll., (2001) *Perceptions de la population québécoise en lien avec les programmes de prévention de la toxicomanie et du VIH*. Québec : Institut national de santé publique du Québec.

*moins que l'opinion rapportée pour le tabac qui est pourtant licite. De plus, le cannabis est le seul produit qu'un nombre relativement important de sondés considèrent comme jamais dangereux pour la santé. (...) les gens le considèrent moins dangereux que le tabac.»*¹⁵ Les enquêtes perçoivent aussi que le cannabis est la substance la moins susceptible de mener à la dépendance : environ 15 % pensent que le cannabis crée la dépendance dès qu'on l'essaie alors que pour plus de 40 % des répondants il faut en consommer chaque jour et que 8 % disent que le cannabis ne crée jamais de dépendance.¹⁶

Eu égard aux opinions sur les politiques publiques, l'étude démontre une nette préférence pour les mesures de prévention et d'éducation par rapport aux mesures de contrôle et de répression. À la question de savoir quelles mesures seraient susceptibles d'enrayer les problèmes de la drogue, près de 35 % pensent que la vente contrôlée de la marijuana et du haschich permettrait de réduire les méfaits. Selon les auteurs, la population montre «une ouverture sans équivoque à une certaine forme de légalisation du haschich et de la marijuana. Plus de 90 % d'entre eux seraient d'accord à ce qu'on permette à certains grands malades de recevoir ces substances sur prescription pour soulager leurs douleurs. Beaucoup moins de gens mais tout de même une majorité (60 %) seraient prêts à autoriser la consommation de ces drogues sous certaines conditions comme peut-être l'alcool.»¹⁷ Par ailleurs, moins de 40 % pensent que la loi actuelle contribue à empêcher les gens de consommer (et environ 60 % sont plutôt ou tout à fait en désaccord avec cet énoncé).¹⁸

En Ontario, l'enquête en milieu scolaire a aussi examiné les perceptions des étudiants sur le risque perçu et la désapprobation eu égard à la consommation de marijuana. Le tableau suivant présente les résultats.

Perceptions des étudiants ontariens, niveau secondaire 1989-2001¹⁹

	1989	1991	1993	1995	1997	1999	2001
Désapprouvent l'expérimentation							
Total	40,8 %	43,2 %	37,1 %	28,8 %	23,4 %	26,0 %	28,6 %
7^e	58,9 %	58,0 %	48,6 %	44,9 %	40,8 %	44,3 %	48,2 %
9^e	38,0 %	48,3 %	38,8 %	30,1 %	21,6 %	25,7 %	23,7 %
11^e	33,0 %	32,5 %	30,2 %	16,3 %	13,2 %	18,2 %	19,4 %
13^e	26,7 %	28,4 %	27,7 %	25,7 %	18,8 %	13,4 %	20,7 %
Désapprouvent la consommation régulière							
Total	61,0 %	60,8 %	55,9 %	47,2 %	45,2 %	43,1 %	41,7 %
7^e	73,7 %	72,1 %	66,6 %	62,3 %	58,7 %	63,6 %	64,0 %

¹⁵ *Ibid.*, page 3

¹⁶ *Ibid.*, page 27.

¹⁷ *Ibid.*, page 4

¹⁸ *Ibid.*, page 38.

¹⁹ Adlaf, E.M., and A. Paglia (2001), *Drug Use among Ontario Students 1977-2001. Findings from the OSDUS*, Toronto: Centre for Addiction and Mental Health.

	1989	1991	1993	1995	1997	1999	2001
9^e	59,8 %	62,5 %	54,3 %	48,6 %	41,1 %	43,6 %	34,3 %
11^e	54,9 %	52,4 %	50,9 %	33,6 %	30,9 %	31,2 %	29,8 %
13^e	50,1 %	56,1 %	51,1 %	48,6 %	42,6 %	32,8 %	40,7 %
Associent un risque élevé à l'expérimentation							
Total	27,8 %	30,7 %	27,3 %	18,5 %	17,1 %	18,4 %	18,6 %
7^e	39,2 %	37,0 %	35,3 %	30,7 %	26,2 %	28,4 %	27,0 %
9^e	29,7 %	35,4 %	29,3 %	18,6 %	14,3 %	16,6 %	18,5 %
11^e	18,0 %	25,2 %	21,8 %	10,5 %	12,8 %	15,2 %	11,1 %
13^e	19,2 %	21,2 %	19,7 %	14,2 %	16,4 %	12,5 %	17,7 %
Associent un risque élevé à la consommation régulière							
Total	75,4 %	73,3 %	69,3 %	58,1 %	56,1 %	52,0 %	48,2 %
7^e	72,6 %	72,1 %	69,8 %	67,6 %	60,5 %	63,6 %	61,1 %
9^e	79,1 %	74,0 %	73,7 %	60,8 %	59,3 %	53,1 %	47,8 %
11^e	74,7 %	73,9 %	66,9 %	50,8 %	49,4 %	44,9 %	36,8 %
13^e	73,3 %	73,1 %	63,4 %	50,6 %	55,7 %	45,2 %	47,8 %

Ces résultats démontrent que, sur tous les indicateurs, les attitudes des étudiants ontariens de niveau secondaire sont moins alarmistes, ou plus libérales, selon le point de vue que l'on adopte. Ainsi, ils sont moins nombreux en 2001 qu'en 1989 à désapprouver la consommation expérimentale (une ou deux fois) de cannabis ou la consommation régulière. Ils sont cependant toujours plus nombreux à désapprouver la consommation régulière que la consommation occasionnelle. Le niveau de désapprobation diminue plus le niveau scolaire augmente. De même, les étudiants ontariens sont moins nombreux à associer un risque élevé à la consommation de cannabis en 2001 qu'en 1989, mais ils demeurent près de trois fois plus nombreux à associer un risque élevé à la consommation régulière qu'à la consommation expérimentale. Notons tout de même que la proportion de ceux qui associent un risque élevé à la consommation régulière de marijuana forme maintenant moins de la moitié des élèves, comparativement aux trois quarts en 1989.

L'ensemble de ces données s'accordent dans une large mesure avec les résultats de l'étude que le Comité a commandée à la firme Léger Marketing.²⁰ Cette étude qualitative par groupes de discussion avait pour objectif de déterminer s'il était possible d'identifier les éléments qui pourraient fonder un consensus social sur l'usage du cannabis. Plus spécifiquement, cette étude visait à cerner la perception globale à l'égard des drogues en général et du cannabis en particulier, les images associées au cannabis, les attitudes et comportements à l'égard de l'usage récréatif, les craintes et préjugés, la connaissance du cadre législatif et les attentes à l'égard d'une politique publique sur l'usage du cannabis à des fins récréatives. Pour ce faire, la firme a réalisé 16 groupes de discussion ainsi que 15 entrevues en profondeur à Montréal, Trois-Rivières, Halifax,

²⁰ Léger Marketing (2002) *Étude exploratoire auprès des Canadiens sur l'usage du cannabis*. Montréal : auteur. Disponible en ligne sur le site du Comité.

Winnipeg, Vancouver, Toronto et London. Au total, plus de 130 personnes ont participé à cette étude. Dans chaque ville, il y avait au moins deux groupes de discussion, un avec des adultes de plus de 18 ans et l'autre avec des jeunes de 14 à 17 ans.

Spontanément, les participants aux groupes de discussion ne mentionnaient pas les drogues parmi leurs préoccupations quotidiennes, celles-ci se centrant plutôt sur la santé, l'éducation, l'emploi et la pauvreté. Lorsque le sujet était abordé par les enquêteurs, les participants nommaient d'abord les activités criminelles reliées à la vente et à l'importation de drogues comme préoccupation principale plutôt que l'usage par les Canadiens. Dans certaines villes, (Montréal, Vancouver), les participants exprimaient aussi une inquiétude sur l'impact de la présence de drogues illicites dans certains quartiers sur la qualité de vie et la sécurité.

Interrogés sur le cannabis, les participants faisaient presque systématiquement et spontanément une distinction entre des drogues douces (cannabis, haschich) et des drogues dures (cocaïne, héroïne), plusieurs considérant même le terme drogue inapproprié pour parler du cannabis. Cette distinction reposait sur la base de deux éléments majeurs : la composition et les effets. Les drogues dures sont davantage associées aux produits chimiques avec des effets destructifs, notamment une propension plus grande à développer la dépendance. Le cannabis et ses dérivés sont associés à des plantes, à des produits naturels, et le risque de dépendance est presque nul, sauf chez des personnes ayant des prédispositions ou des vulnérabilités particulières. La comparaison avec l'alcool était fréquente : on peut consommer de l'alcool de manière raisonnable sans danger, et seule une petite partie des consommateurs développe des problèmes de dépendance. On n'associait pas non plus le cannabis à la criminalité : *« I can't picture a guy robbing the corner store to buy himself a joint. This is something heroin addicts would do. First, pot is cheap, second it doesn't make you want it desperately. »* La seule exception plus présente au Québec qu'ailleurs, était l'association avec la criminalité organisée, les bandes de motards.

Tandis que l'usage de drogues « dures » s'inscrit dans un univers de détresse morale et physique et déchéance sociale, les participants associaient généralement une dimension de convivialité et de plaisir à l'usage du cannabis, qu'on consomme surtout dans des occasions sociales, comme l'alcool.

En toute logique, l'usage récréatif du cannabis était généralement bien accepté : *« it doesn't bother me that people do marijuana. As long as they are aware of their decision and what they are doing, I respect it. »* De fait, spontanément, plusieurs participants dans chaque groupe évoquaient leurs propres expériences de consommation passée ou actuelle : *« I sometimes smoke pot and it doesn't keep me from being a productive guy at work or a good family man. »* Et comme pour l'alcool, ce sont davantage les notions d'abus et de responsabilité qui marquent la différence, quoiqu'on soit plus dur envers les abus d'alcool qu'on associe à la violence. *« I used to go out to bars a lot. Every night there would be a fight. A guy gets drunk and then starts insulting somebody else or feels another is flirting with his girlfriend. At one point punches get thrown around. But you know what ? I have never seen a guy*

stoned on pot go nuts and want to knock somebody out. » S'ils n'associaient pas la consommation de cannabis ni à la violence ni à la criminalité, les participants se montraient cependant préoccupés par la conduite sous l'influence de cannabis. Enfin, les participants n'associaient pas la consommation de cannabis à une classe déterminée de la population : ce sont les jeunes mais aussi des professionnels, des artistes, des avocats, des fonctionnaires...

Les chercheurs n'ont pas observé de clivage générationnel à l'égard de l'usage récréatif du cannabis. Si un clivage existe, il reposerait davantage sur des caractéristiques socioprofessionnelles : les citoyens moins scolarisés et résidant en milieu rural semblent démontrer une plus grande résistance. De même, les personnes s'opposant à la consommation récréative de cannabis le feraient plutôt sur des bases morales, parfois même religieuses. Autre clivage, les femmes ayant des enfants d'âge scolaire, se disaient très préoccupées par la grande disponibilité de la marijuana en milieu scolaire. *« Qu'ils légalisent ou pas moi ça ne change rien. Moi, tout ce que je veux c'est que les drogues ne soient pas accessibles aux enfants. Qu'ils en vendent au primaire moi ça m'enrage parce que ça les rend dépendants très jeunes. »*

Comme les sondages d'opinion publique discutés plus tôt l'ont démontré, les participants appuyaient largement la légalisation du cannabis à des fins thérapeutiques. Toutefois, certains souhaitaient qu'une structure claire de distribution soit établie dans les établissements de soins et qu'on puisse déterminer les doses adéquates selon l'intensité de la douleur.

En général, les participants estimaient qu'une consommation occasionnelle n'a pas d'effets néfastes sur la santé. Faisant spontanément la comparaison avec l'alcool et le tabac, ils considéraient que le cannabis n'est pas la plus dangereuse des trois substances. De même, la majorité ne craignaient pas l'accoutumance au cannabis, soulignant que ça dépend de la maturité et de la fréquence de la consommation. *« This is the key question. I don't think you can get hooked on it really. Not as much as booze or nicotine for sure. But that's the kind of proof or medical evidence I would like to have if you want me to make up my mind on it. »* Les participants ne pensaient pas non plus que le cannabis pousse inexorablement à la consommation d'autres drogues, l'utilisation de drogues « dures » étant liée davantage à la personnalité et à la maturité de l'utilisateur qu'aux caractéristiques du cannabis lui-même.

Le guide d'entretien demandait aux participants de réagir à deux données de recherche : la proportion de Canadiens qui ont consommé au cours des 12 derniers mois est d'environ 10 % et il se fait environ 30 000 mises en accusation par année pour possession simple de cannabis. Dans les deux cas, les participants étaient incrédules. Sur la proportion de consommateurs, tous les participants pensaient qu'il y en avait beaucoup plus : *« Ça me surprend que ça soit juste 10 % de la population, qui en consomme. Je m'attendais plus à 50 % ou 60 %. »* Inversement, sur le nombre de mises en accusation, les participants étaient unanimes à penser que les efforts des services policiers devraient plutôt porter sur la lutte aux réseaux criminels : *« 30 000 people charged per year seems like a waste of taxpayers money if just for possession. It's a lot of money to prosecute and they all get thrown*

out anyway... » « *Quand on pense à d'autres crimes beaucoup plus importants, quand on pense à l'encombrement du système judiciaire, je trouve ça ridicule.* » Néanmoins, les participants considèrent que le Canada est une société relativement tolérante à l'égard de l'usage récréatif du cannabis, du moins comparativement à d'autres pays : côté répressif on nomme spontanément les États-Unis, l'Arabie saoudite, et côté tolérant on pense à la Suisse et aux Pays-Bas, le Canada étant quelque part entre les deux.

Les entretiens se sont produits après que le Comité eut rendu public son document de discussion dans lequel il proposait un tableau comportant une série d'options de politiques publiques. Les participants aux groupes de discussion étaient d'abord invités à faire part librement de leurs opinions sur les politiques publiques préférées puis on leur soumettait ce tableau leur demandant d'y réagir.

Le discours des participants tendait majoritairement vers un positionnement entre la décriminalisation et la légalisation. Cette position se retrouvait principalement à Montréal, Toronto, Vancouver et Halifax, plus de participants préférant la légalisation avec contrôles gouvernementaux à Vancouver et Montréal qu'ailleurs « *The best option is decriminalization leaning towards government legalization. The worst option would be depenalization : to legalize without getting involved.* » Selon les participants, ces options permettraient d'augmenter la capacité d'informer sur les risques, la santé des usagers, la sécurité publique, le respect des droits et libertés individuelles et l'efficacité des dépenses publiques, et feraient diminuer le trafic illégal et l'implication du crime organisé. Par ailleurs, ils s'attendaient à une augmentation de la consommation récréative du cannabis mais ne pensaient pas qu'il y aurait nécessairement augmentation de l'abus ou de la consommation chez les jeunes. Au contraire, plusieurs étaient d'avis que la décriminalisation entraînerait un désintérêt chez les jeunes qui auraient perdu l'attrait du fruit défendu.

Il demeure un noyau dur, quoique minoritaire, qui estime que les lois actuelles ne sont pas assez sévères et que la société devrait se diriger vers une criminalisation accrue de l'usage récréatif de cannabis. Cette position se retrouvait notamment à Winnipeg chez les personnes de plus de 40 ans et à Trois-Rivières.

Enfin, les participants souhaitaient être informés et « éduqués » sur ce qui concerne l'usage du cannabis, notamment sur les connaissances scientifiques sur les effets à court et à long terme, sur les risques réels de dépendance et d'escalade, sur les moyens de protéger les enfants contre une consommation précoce, et sur les impacts de la décriminalisation sur la lutte au crime organisé.

Selon les auteurs de l'étude, les marqueurs suivants ressortent :

- La protection des jeunes et des enfants est au cœur de toute réflexion sur une politique publique sur le cannabis ;
- La décriminalisation de l'usage se dégage comme option privilégiée, permettant de reconnaître la réalité sociale en même temps que de se concentrer sur les « vrais » problèmes ;
- Un certain nombre de participants se sont exprimés en faveur de la légalisation, s'interrogeant cependant sur la nature et les modes de

contrôle relatifs à la production et aux normes de qualité, aux modes de distribution et de commercialisation, la mise en place de quotas pour éviter les abus.

Puisqu'il s'agit d'une enquête qualitative, nous ne pouvons généraliser ces résultats à l'ensemble de la population canadienne. Nos moyens financiers ne nous ont pas permis de mener une étude quantitative en profondeur sur un échantillon représentatif de la population, ce qui aurait pu permettre de valider ces « intuitions ». Néanmoins, nous pouvons au moins émettre les constats suivants : (1) ces résultats se rapprochent beaucoup des données résultant des sondages d'opinion ; (2) les convergences entre les groupes de discussion dans la plupart des villes et entre les groupes d'âge permettent de penser qu'il y a une certaine validité à ces intuitions.

ATTITUDES ET OPINIONS EXPRIMÉES AU COMITÉ

Des centaines de Canadiens de tous les coins du pays nous ont écrit, et plusieurs dizaines se sont exprimés lors de nos audiences publiques dans les régions. Ils parlaient en leur nom personnel, relatant leurs expériences, exposant leurs opinions, nous faisant part de leurs craintes. Ils représentaient des organisations : associations de défense des droits et libertés, clubs compassion de distribution de cannabis thérapeutique, organismes de traitement ou de prévention, associations de femmes. Ils étaient maires, chefs de police, usagers de cannabis médical, parents, éducateurs, médecins, avocats, consommateurs de cannabis, jeunes et moins jeunes. Ils parlaient souvent du cœur et leurs paroles nous touchaient. L'annexe 2 fournit la liste de toutes les personnes que le Comité a entendues au cours de ses audiences publiques. Nous tenons à remercier tous ceux et celles qui ont participé à nos travaux.

Il est impossible de présenter ici l'ensemble de ces contributions à nos débats, d'en faire ressortir l'extraordinaire richesse. Heureusement, les transcriptions des audiences du Comité resteront disponibles sur notre site internet. Nous nous contenterons d'un sommaire des opinions qui nous ont été transmises en réaction à notre document de discussion.

Soulignons d'abord que les citoyens qui ont pu exprimer leur avis étaient la plupart du temps très satisfaits de la rigueur de nos travaux et surtout très appréciatifs de l'occasion qui leur était donnée de participer à ce débat de société.

« J'ai suivi avec grand intérêt les délibérations du Comité spécial sur les drogues illicites et je voudrais remercier la personne qui a décidé de publier le mémoire de façon aussi complète et franche. Cela témoigne favorablement d'un gouvernement transparent, aspect vital pour le règlement du débat. »

« Je voudrais tout d'abord féliciter le Sénat pour son Comité spécial sur les drogues illicites et son travail impartial et révolutionnaire sur la marijuana (...) »

« Je vous remercie de prendre le temps d'examiner ma présentation. Je voudrais féliciter le Comité du Sénat sur les drogues illicites de son excellent travail de recherche sur les faits et la critique des mythes qui existent sur les drogues illicites (...) »

« Tout d'abord, je voudrais remercier le Comité de ses compétences à séparer les faits de la propagande qui entoure cette question. (...) Je vous remercie de prendre le temps de recevoir la participation du public en la matière. Je souhaite seulement que cela ne tombera pas dans l'oreille d'un sourd comme ce fut le cas de la Commission Le Dain qui vous a précédés. Là encore, je crois que le Comité cherche à faire de son mieux pour le peuple canadien. (...) »

« C'est avec grand intérêt que j'ai lu votre Document de discussion sur le cannabis et la documentation qui l'accompagnait. Je me permets de vous féliciter pour votre disposition à lancer un débat public dans ce domaine de politique. (...) »

La plupart des personnes qui ont pris le temps de nous répondre ont aussi indiqué avoir trouvé le Document de discussion bien fait, utile et équilibré. Surtout, les répondants exprimaient leur accord avec les données de recherche que nous y avons présentées. Lorsque des réserves étaient exprimées elles concernaient diversement :

- Des biais dans l'interprétation des données : pour certaines personnes, il ne fait pas de doute que le cannabis est une drogue d'escalade ;
- Un côté trop prudent : dire que le cannabis est une drogue et qu'à ce titre il vaut mieux ne pas en consommer était perçu comme « politiquement correct » ;
- Un manque de compassion et de préoccupation pour les jeunes et les enfants.

Néanmoins, un certain nombre d'organismes et de personnes ont exprimé des réserves face à notre démarche et leur désaccord avec les conclusions énoncées dans notre document de discussion.

« Pour nous autres, ça ne fait pas de sens de légaliser une drogue avec tous les points d'interrogation et les faits concluants que l'on voit comme conséquences de l'usage du cannabis. Si c'était à refaire, je ne pense pas, avec les informations que l'on a présentement, que l'on voudrait légaliser la nicotine et même l'alcool. Du moment où l'on envisage de légaliser une drogue, on peut conclure qu'il y aura plus de disponibilité conséquemment plus de consommation, et conséquemment plus de problèmes. N'oublions pas que le cannabis n'est pas nocif parce qu'il est illégal mais plutôt que le cannabis est encore illégal parce que le cannabis est nocif. »²¹

²¹ Mémoire de A. Maillet et C. Cloutier-Vautour soumis au Comité spécial du Sénat sur les drogues illicites, Moncton, 5 juin 2002.

[Traduction] « Il est sain et utile de tenir un débat public informé, mais encore faut-il que la diversité des points de vue puisse s'exprimer. Malheureusement, ce n'est pas le cas lorsqu'il est question de l'usage non médical des drogues, où nous sommes constamment bombardés par les opinions de ceux qui croient que la seule manière de répondre au problème des drogues est d'accepter qu'elles sont inévitables, sinon normales. (...) »

Lorsqu'il est question de stratégies sur les drogues, on discute le plus souvent des dommages extrinsèques causés par l'illégalité des drogues illicites plutôt que des dommages intrinsèques dus à leurs effets chimiques sur le corps, particulièrement sur les fonctions cérébrales et le comportement. On ignore ainsi les effets dévastateurs des drogues sur les toxicomanes et leurs familles et l'on déplore plutôt les dommages d'un casier judiciaire sur l'estime de soi. De plus, les crimes contre la propriété et la violence causés par les usagers de drogues sont attribués à l'illégalité des drogues plutôt qu'au manque d'habitudes de travail et de capacité à gagner sa vie que cause l'usage de drogues. »²²

[Traduction] « Notre préoccupation face au Document de Discussion publié par le Comité tient essentiellement à l'effet que les politiques sur le cannabis auront sur les jeunes et les familles. (...) Nous suggérons au Comité qu'il serait plus utile de concentrer ses efforts sur la prévention que sur la réforme de nos lois sur les drogues. La Stratégie canadienne sur les drogues démontre que la prévention est la stratégie la plus efficiente. (...) Il se dit beaucoup de choses sur la supposée « guerre à la drogue » : si nous l'avons perdue, ce que nous devrions faire, et si nous étions engagés dans une guerre pour commencer. Le défi auquel fait face ce Comité n'est pas facile : recommander des politiques réalistes, concrètes, sur l'usage du cannabis. Nous sommes convaincus que le Comité saura faire montre de prudence dans ses décisions, et que ses recommandations de politique seront innovatrices, tout en sachant résister à la « manie du cannabis ». Nous le devons à nos jeunes. »²³

« S'il vous plaît, mesdames et messieurs, ne vous fiez pas qu'aux recherches et aux experts. Beaucoup de rapports et d'experts sont largement financés par des promoteurs de la légalisation. Le THC, l'ingrédient actif du cannabis, peut être pris sous forme de pilules. Nous n'avons pas besoin de promouvoir le fumage sous une autre forme. (...) Si je peux vous faire une suggestion : 1. Il faut offrir plus de services de traitement ; 2. Il faut changer nos pratiques d'incarcération lorsqu'il s'agit de crimes commis sous l'influence des drogues et imposer le traitement ; et 3. Notre pays doit adopter une politique de tolérance zéro face aux drogues illicites et donner à nos policiers la capacité d'appliquer les lois et exiger des tribunaux qu'ils répondent à cette situation. Je vous en prie, ne donnez pas à nos enfants une autre manière d'échapper à la réalité. »²⁴

Enfin, la plupart des personnes qui ont répondu au questionnaire nous ont aussi dit être en faveur soit de la décriminalisation, soit de la légalisation contrôlée du cannabis et de ses dérivés. Pour cette raison, nous devons demeurer très prudents quant à la signification des commentaires qui nous ont été transmis : il est probable en effet que la majorité de ceux qui nous ont écrit soient, pour des raisons personnelles,

²² Real Women of Canada, mémoire soumis au Comité spécial du Sénat sur les drogues illicites, 6 juin 2002, pages 1-2.

²³ Focus on the Family (Canada) Association, mémoire soumis au Comité spécial du Sénat sur les drogues illicites, 14 mai 2002, page 2.

²⁴ Lettre de Mme Kathy Bédard, Prince Rupert, Colombie-Britannique, 15 mai 2002.

intéressés à ce que la législation actuelle soit modifiée vers une plus grande tolérance. Cette attitude colorait sans doute leur évaluation de notre Document et de la qualité de nos conclusions de recherche.

CONCLUSIONS

Quel est l'état de l'opinion publique au Canada ? Nous ne sommes pas en mesure de tirer des conclusions fermes sur cette question. Nous pensons cependant que :

Conclusions du chapitre 10

Opinions sur le cannabis

- Une opinion publique plus libérale qu'il y a dix ans sur le cannabis.
- Une tendance à penser que la consommation de cannabis est plus répandue qu'auparavant.
- Une tendance à considérer que le cannabis est plus disponible qu'auparavant.
- Une tendance à penser que le cannabis n'est pas une drogue dangereuse.
- Une préoccupation relativement importante face au crime organisé.
- Un soutien important pour la mise à disposition du cannabis aux fins thérapeutiques.

Opinions sur les options de politique publique

- Une tendance à favoriser la décriminalisation ou, dans une moindre mesure, la légalisation.
- Une attitude critique face aux mesures d'application de la loi pour simple possession de cannabis.
- Une préoccupation pour les enfants et les jeunes.



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